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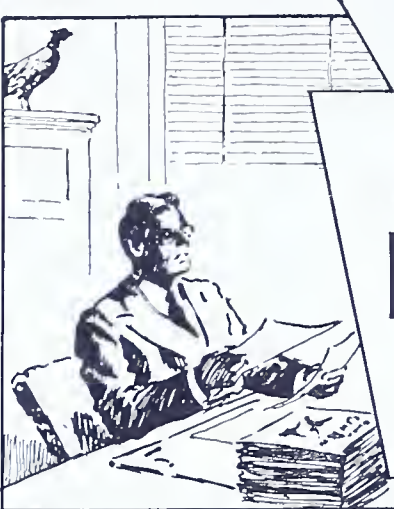
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Game News

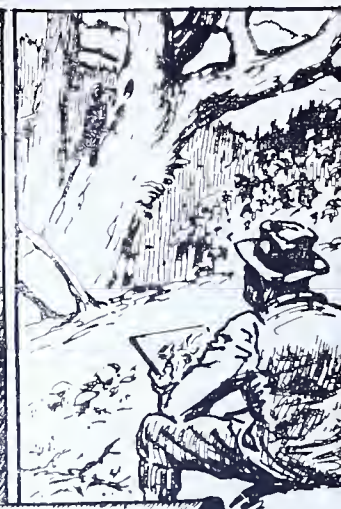


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PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

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A COVENANT FOR CONSERVATION

"WE GIVE OUR PLEDGE"

We in Pennsylvania and in America pledge and give our time, our efforts, and our earthly goods to worthy causes to make life more pleasant for our fellow man and to make the world a better place in which to live. It is humanitarian to give and American to pledge.

"AS AMERICANS"

As Americans, we control our own destiny. We can be born in a humble log cabin and eventually live in the White House. Our pathway through life can be one of our own choosing no matter who we are or where we were born. We can worship, work, and play anywhere, anytime, and in any way we desire. In a land of freedom our opportunities are unlimited, our traditions great, and our liberties guaranteed. We are a people of all races, colors, and creeds—mixed together in one mighty nation yet working together in peace and unity—one for all and all for one, each as an American.

"TO SAVE AND FAITHFULLY TO DEFEND"

For almost two centuries we have faithfully defended and preserved our way of life. Through war and peace we have retained the ideals upon which our country was founded. The great faiths and ideals of our forefathers remain unchanged by time; their hopes for America have in large part been fulfilled. We always have and always will dedicate ourselves to saving and defending for our children unlimited opportunities in a greater America.

"FROM WASTE"

Waste and Americanism too often have gone together. Because we have had so much, we often disregard as worthless material things which are considered priceless by others. Even our scraps have provided the means for others to wage war against us. Now, with the welfare of the world on our shoulders, every pound of food, every ton of metallic ore, every board of lumber—everything American—counts! Today, conservation of these resources determines our future greatness. We must use them wisely and protect them from waste.

"THE NATURAL RESOURCES OF OUR COUNTRY"

By the grace of God, America is blessed with an abundance of natural resources. Americans have developed their resources into the highest standard of living in the world. They say America has everything—it has—who would deny it? We have more railroads and automobiles built from a great store of minerals, more and better homes built from vast forests, more food grown from rich soils, and more electricity produced from great rivers. What could we have or what would we be without the natural resources of our country?

"ITS SOILS AND MINERALS"

Life comes from the soil. The food we eat, the clothes we wear, the fuel we burn all come from the rich earth of America. Skyscrapers and sewing needles, radio sets and writing pens, atom bombs and axes, all come from the "dirt beneath our feet". Our greatness lies in the thin crust of our land.

ITS FORESTS, WATERS, AND WILDLIFE

Today, every stand of forest, every drop of clear, clean water, and all wildlife carries a message for Americans. "Use us wisely," they say, "or we vanish together." How well we preserve and profit from God's great outdoors—forests, waters, and wildlife—will determine our future welfare. Shall we despoil and become beggars along the pathways of our plundered planet or shall we conserve and set an example for humanity?

A pledge for conservation is assurance for the future!

Based on winning pledge submitted in a contest sponsored by *Outdoor Life Magazine*.



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G. Stanley Smith

CONSERVATION WEEK

THE city dweller who wouldn't even dream of entering the country except on a well-paved highway, might think that he has no concern with our wildlife resources or their problems. Pennsylvania Conservation Week means no more to him on the surface than would National Necktie Week. "Why," he might ask in all sincerity, "should I bother with stuff like that? I don't hunt. I don't fish. I don't even go outdoors if I can help it."

That is what he thinks. This is what he doesn't know. Directly or indirectly he is affected every day of his existence by the welfare of the nation's wildlife. If all insect-eating birds were destroyed, he probably would stop eating. If all hunting and fishing ceased immediately, he probably would be hit hard in the pocketbook. Between stomach and wallet, he certainly would suffer.

Since money talks in a language easily understood by everyone, let's look at the financial side of the wildlife situation. Hunting and fishing are the two biggest sports in the nation, barring none. In comparison, baseball, football, boxing and horse racing are picayune things, both in the number of persons interested and in the money spent. Hunting and fishing are an annual *four billion dollar* industry. The lowest reliable estimate puts the number of persons who gun and fish at *twenty-five million*. The U. S. Fish and Wildlife Service has estimated that nearly that many persons go fishing alone, without counting in hunting. But we will be conservative and stick to twenty-five million outdoorsmen of both sorts.

If, like most of us, you are accustomed to thinking of money in terms of one-dollar and five-dollar bills, it may be difficult to picture four billion dollars spent annually on outdoor sports. That's a big sum. That's more money than is spent each year on all the nation's filling stations. It's more money than is spent in all the drugstores of the land. It is far more than is paid out to the entire liquor industry. It's several times more than is spent on jewelry.

We can break it down still more. A prize fight that draws a million dollar gate is a big event. It gets weeks of publicity on the air and in the newspapers. The general attitude is one of "Just look at this tremendous

event!" Well, on every single day of the year, hunting and fishing men spend *ten times* a million dollars on their sports. The average ten million dollars a day! Think of it—ten million dollars a day!

Now, then, what would happen if these twenty-five million people suddenly stopped spending their annual four billion dollars? There would be something close to a financial panic in the country. Hundreds of thousands would be thrown out of work. Other hundreds of thousands would have their income severely cut, even if they never heard of hunting and fishing as sports. Boats would rot at their piers. Many resorts would close. Travel, and all the money spent on travel, would be slashed. Firms specializing in outdoor clothing and other accessories would close. Gun, ammunition and tackle firms would fail. No business worth four billions annually could collapse without affecting *you*, no matter what you do.

Then there is a good reason why we observe Pennsylvania Conservation Week. That's why Pennsylvania as well as all other States, considers the outdoor sports one of the main sources of income, and of tremendous recreational value.

This spending program is entirely dependent upon maintaining an adequate supply of fish and game. If there are no fish and game, there will be no angling and no hunting. Pennsylvania Conservation Week only tries to focus attention on something that is important to everyone, on something in which so many people are interested.

Let us reduce this spending down to a human element. Let's take John Jones, for example. He's the man who lives on the place next to yours, or across the street from you. He likes hunting and fishing. He does one or the other whenever possible from early spring to winter. He is not rich but he spends quite a bit on his sports. Before he even steps out of the house, he has paid an average of two dollars each for his fishing and hunting licenses. That is his direct contribution to maintaining, supplying and protecting fish and game, because the State spends his license money for just those purposes.

When John Jones does step out of the

—WHY?

use, he probably has with him at least one hundred dollars worth of special equipment for his fishing and hunting. Some of his friends may carry only twenty dollars worth, some may have two thousand dollars worth, depending upon their financial standing. But average John Jones has spent about one hundred dollars before he enters the car at the curb. For fishing, he has a rod, a reel, a line, any number of lures, leaders, hooks, sinkers, fish knives, bait boxes, a creel and a hat-nots. He has special clothing, hip boots or waders, fishing jackets, waterproof clothing. For hunting, he carries a gun that's anything but cheap, ammunition, good walking boots are on his feet, he has a car and water-resistant jacket and breeches. Somebody has made all those things. A lot of persons have jobs making them. Multiply John Jones by twenty-five million and you will see how many persons depend upon him and his friends for a living. You cannot even imagine that many people.

That's the picture of John Jones nationally. Let's consider him, however, where he lives, Pennsylvania. Let's see what he does in his own State and what he means financially to his State aside from the wonderful benefits he derives from hunting and fishing. It may give a clearer view of how important wildlife conservation can be.

There are approximately one million hunters in Pennsylvania each year. The Game Commission sells approximately 850,000 licenses annually at present. In addition there are some 150,000 Pennsylvanians who do not need hunting licenses because they hunt on their own or adjoining land. We'll forget them, though, in this discussion and stick to the 850,000 licensed hunters. Then, there are about 500,000 Pennsylvania fishing licenses sold annually.

That makes one million, three hundred and fifty thousand fishermen and hunters licensed each year in the State. At \$2 per license, they spend two million, seven hundred thousand dollars before they ever go hunting or fishing. Nearly three million dollars spent every year on licenses alone! That money benefits nearly everyone in the State, as we shall see, directly or indirectly. In Pennsylvania it is spent to improve fish-

ing and hunting, to preserve our wildlife resources.

John Jones, remember, spends an average one hundred and fifty dollars annually on his hunting and fishing. And that is a most conservative estimate. John Jones wouldn't admit it to his wife, but he probably spends closer to several hundred dollars a year on his favorite sports by the time he buys new gadgets in the sporting goods stores or obtains them from the dealers who advertise in the sporting magazines.

Multiply one million, three hundred and fifty thousand licensed Pennsylvania hunters and fishermen by one hundred and fifty dollars expenditures each—and what do you get? Well, it's a staggering sum! It's hard to believe the evidence of figures—but they say figures don't lie. John Jones and his friends spend considerably more than *two hundred million dollars a year* to hunt and fish in Pennsylvania! They spend at least \$197,000,000 to pursue the sport yet only about \$3,000,000 is used to create it.

What's more, most of that money is spent right in Pennsylvania. Very little of it goes outside the State. Furthermore, the figures do not include nearly half a million residents of Pennsylvania who prefer salt water fishing in New Jersey or Maryland. Special trains and buses carry them from Philadelphia to New Jersey points daily during the height of the season. They spend plenty in their home State on equipment and other needs.

Now, perhaps, your stake in the conservation of wildlife is becoming more clear. No matter what your work might be, you undoubtedly are affected by the spending of two hundred million dollars annually in your State. Take those two hundred millions out of the State's financial structure and it would leave an awful gap. You would feel it.

John Jones is quite independent. He pays his own way and asks no favors of anyone. He does not beg appropriations from the legislature to further his sport. He pays his license fee each year, and the money is used to improve wildlife conditions. His hunting and fishing affairs are run by two

(Continued on Page 19)



P. S. --

(THEY GOT CAUGHT!)

By W. C. SHAFFER

Chief, General Field Operations Division, Pennsylvania Game Commission

LORDS VALLEY, a peaceful community of seventy-five souls, thirty-six dogs and a half-dozen cats of questionable ancestry, in the heart of the big game country in Pike County, Pennsylvania, was exactly as the Lord had planned it to be—quiet and peaceful—the early evening of Sunday, December 1, 1946. True, automobiles bearing New York, New Jersey, Connecticut and Pennsylvania registrations were going and coming in greater numbers than usual: an annual barometer that the big game season in Pennsylvania was to open the following day.

Hunting camps, many unoccupied since the close of the previous season, were silently welcoming the faithful old members while the apprentice hunters busied themselves grappling with endless bundles of bed clothing and foodstuffs. But at Schmalzles' boarding house, noted for its food and hospitality, an entirely different scene was being enacted. Supper finished, a handful of hunters were

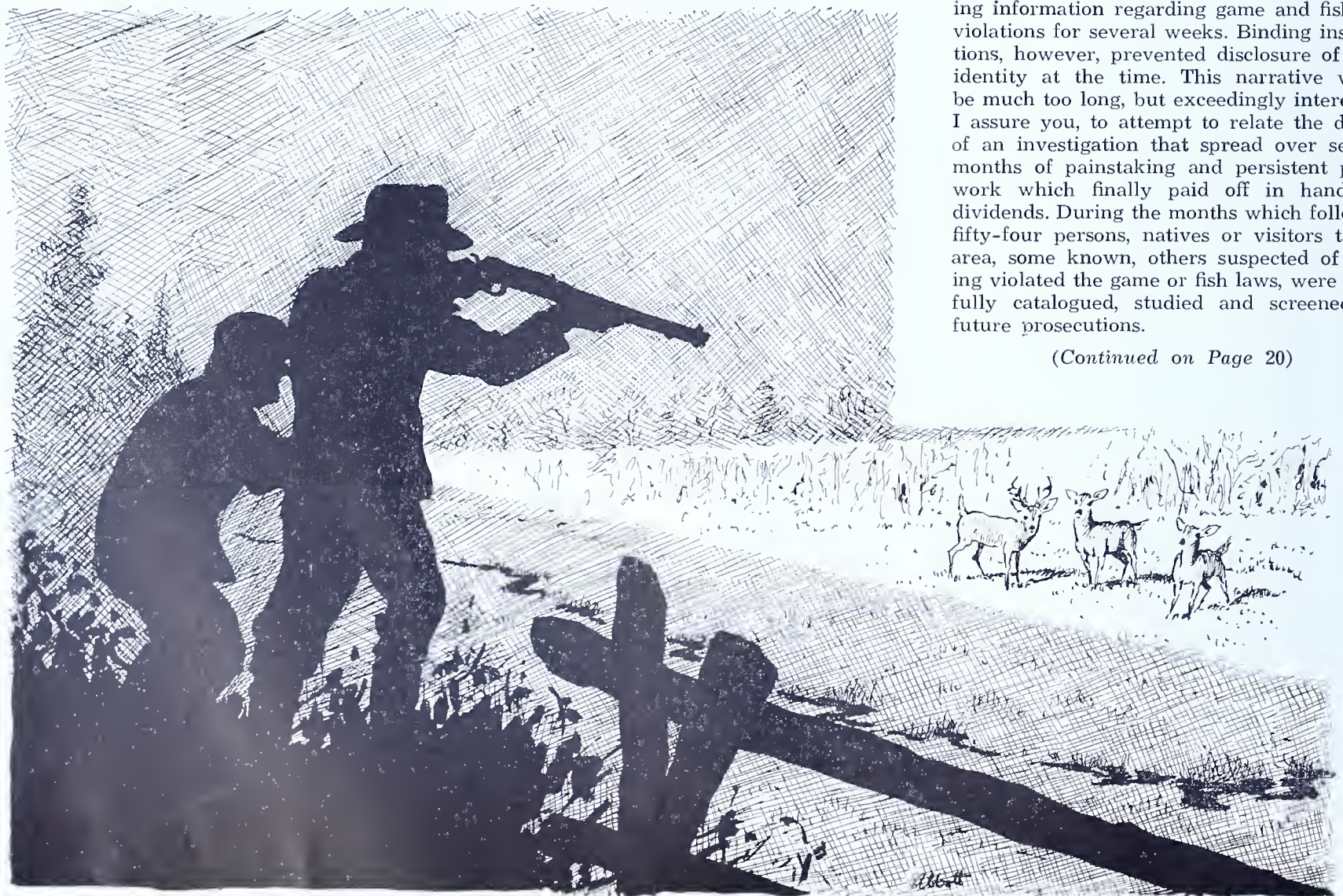
warming their shins and their hearts beside the big stove in the living room—in spirited competition for the annual prize of the Liars' Club. One fellow started off modestly, but each succeeding liar went him one better; until, after a fourth had finished, the first quit the race cold, realizing that he had never had a chance. As the stove grew hotter, the kill of ruffed grouse, wild turkeys and rabbits piled up, and male deer with eight points (two to each hoof), were being killed by a single heart shot at a distance of "fully a thousand yards"—without the aid of binoculars!

As the liars paused for breath and a fresh yarn, two of the company excused themselves, explaining that they were going to Milford, the county seat, some twenty miles distant, for some tobacco. Two other men, noticing that one of the departing brethren was displaying a nonresident license, the other a resident license, followed them from

the room, pausing in the kitchen while the strangers went to their car which was parked a short distance back of the house in a field. At the edge of the field three deer were browsing. One chap grabbed his rifle from the car, and, while his companion held a powerful flashlight on the unsuspecting animals, fired two shots at them in rapid succession—in clear vision of several persons who were standing on the porch or looking out the kitchen window. The deer kicked up their heels and took to the tall timber; the men cursed their luck and left in the automobile while the onlookers, venting angry denunciations of such sportsmanship, returned to the living room. Some discussion of the incident followed but nothing was done about it that night.

But something was going to be done about it. Two of those quiet witnesses were Game Protectors specially assigned to make law enforcement observations in that area. Quietly but most effectively they had been gathering information regarding game and fish law violations for several weeks. Binding instructions, however, prevented disclosure of their identity at the time. This narrative would be much too long, but exceedingly interesting I assure you, to attempt to relate the details of an investigation that spread over several months of painstaking and persistent police work which finally paid off in handsome dividends. During the months which followed, fifty-four persons, natives or visitors to the area, some known, others suspected of having violated the game or fish laws, were carefully catalogued, studied and screened for future prosecutions.

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A RESPONSIBILITY OF ORGANIZED SPORTSMEN*

By TOM FRYE

Executive Director, Pennsylvania Game Commission

WHEN I accepted the position of Executive Director of the Pennsylvania Game Commission, it was with the promise to use my early efforts in examining the tools with which wildlife conservation work is performed, and later to design better tools, and to develop more effective ways to use them.

With the help and cooperation of the employes, my friends, and all with whom I come in contact—at the office, on the street, at my home, and at sportsmen's meetings, as well as through correspondence, there has been a constant interchange of ideas and reactions to what we are doing, how it is being done, and most important, how it is possible to do a better, more efficient and more economical job for the benefit of the hunters of Pennsylvania—constantly bearing in mind that the landowners have a very integral part in this entire program.

Perfection is never attained, but it is a fine goal toward which we should strive. The work of the Game Commission is like that of many other organizations—there is, in my opinion, room for improvement. There always will be, because what we consider perfection today becomes outmoded tomorrow. That is progress and if we are out of tune with progress and do not change our plans to meet the ever-

changing conditions, there can be but one result—failure. As we find weaknesses and flaws, we either correct them or plan to do so. From our efforts will emerge a new model—a model that should be as much improved in performance compared to the present model as the airplane of today is improved over the model of a few years ago. That is as it should be, but wildlife management is not a simple nor an easy task. It has complications and problems—lots of them.

Yes, it is possible to do a better job, but there's a catch to it. It's the same as anything else you want or do today; it costs a lot more to get as much or a little more, and it's no more possible to do many desirable things for the hunters today for the same money than it's possible to buy an automobile for the same price you paid a few years ago. It just can't be done! It costs so much more. So the hunters must realize if they want as much or more in the future as they have had in the past, they'll have to pay a lot more for it. Whether they like to pay for it or not, that's the only way they can get it. Mother Nature cannot do the job herself.

* An address delivered at the 18th Annual Meeting of the Pennsylvania Federation of Sportsmen's Clubs held at Harrisburg, February 12, 1949.



Tom Frye

The most effective way for hunters to retain even what they have, let alone have more, is either to roll up their sleeves and go to work to help restore wildlife or to dig down in their pockets much deeper than ever before and pay someone to do it for them. Mother Nature is a tired, worn-out old lady—she's been trampled over by an army on the march—a million hunters in Pennsylvania—back and forth, again and again. Her children—the wildlife—have been murdered by violators, shot by hunters, even unwisely harvested by some sportsmen, and harassed by such tremendous killing pressure that it is almost a miracle that any game exists. And you are reminded that if it weren't for the restrictive Game Laws and the Game Protectors, coupled with the cooperation of a few real sportsmen—too few,—there wouldn't be a piece of game left in the Keystone State. Only the laws and the game management policies have prevented the extinction of game—yet what do we find today?—lawlessness on a rampage—men bent on killing and destroying completely the very thing they love—the sport they should fight to protect and perpetuate. It's too bad we must have laws to protect fools from themselves, but if we are to perpetuate the American way of hunting in Pennsylvania, we must have laws so strict and enforcement so efficient that no man can afford or dare to break them. As one writer points out, because in America the game belongs to everybody, in reality it belong to nobody, therefore nobody cares what happens to it. But it's happening! We hope it isn't too late to save it.

(Continued on Page 21)



"Her children—the wildlife—have been murdered by violators"
(Illegal kills in a small area)



Photo by R. E. Hesselschwerdt.

Upland game requires protective cover near its food supply. Field borders of multiflora rose such as the one pictured here make it possible for pheasants, quail and rabbits to utilize the waste grains left in the fields.

LIVING FENCE

By CARRINGTON H. BURGESS

Reprinted by Special Permission from *Farm Quarterly*, 22 E. 12th St., Cincinnati, Ohio

FENCES are expensive, and going higher. It takes a lot of time to put up a fence, even if you have the money, and you can look forward to the annual chore of keeping it in repair.

Now, if you could grow your own fence, a fence that would last a lifetime, require little or no attention once it is established, and at the same time have a thing of beauty, you would have the answer to a farmer's prayer.

Rosa Multiflora, or Many-flowered Rose when reduced to English, is one answer to the fence problems that has come out of the experimental work of the Soil Conservation Service. It does its job so well that nurseries are having trouble supplying the demand for plants.

Multiflora Rose is cheap, it is an effective barrier for every kind of livestock with the possible exception of hogs, and it is also a wildlife refuge, a barrier, an efficient erosion control, and a thing of beauty.

In an attempt to find a suitable plant to replace the Osage Orange, once called "God's gift to the prairies," but in late years called less complimentary names, Botanist Hugh Steavenson of the Soil Conservation Service Nursery Division in the upper Mississippi Valley made initial trials of plants, widely selected from native and introduced sources, at Elsberry, Missouri. Tests of conspicuous species and varieties were made on 30 distinct problem areas in Missouri and Illinois.

The Asiatic Rose, a Multiflora won over all other contestants and in 1934 Steavenson planted test rows along the borders of the U. S. Soil Conservation Nursery at Elsberry. Later it was taken out and given a thorough trial as a living fence under actual farming conditions.

Unlike Osage Orange, Multiflora Rose is a shrub, hence it occupies much less ground. It attains an ultimate height and spread of six to eight feet, requires no trimming to keep it in bounds, and, unlike Osage Orange, offers little competition to adjacent crops. Its vigor, particularly on the poorer soils, greatly surpasses that of the Osage Orange. Multiflora is colorful in flower, bearing an abundance of small, white or dusty pink flowers which bloom about the same time as other roses. These are followed by masses of berries which turn red and persist through the winter, producing a welcome diet for birds during the lean months.

Multiflora Rose has a special value as a divider between fields farmed on the contour, serving as a fence, a contour guide, and an erosion buffer strip. Living fences are better adapted than wire fences for contour planting.

During the Missouri experiments hedges three to five years old and at various spacings on both hills and bottom land were tested with cows, young calves, horses, sheep goats, and hogs. Animals were enclosed in pad-

docks for two to ten weeks and their behavior closely watched. During the tests, normal rations were reduced at times to encourage the stock to break out in search of food.

Horses, cows, and calves were confined by all barriers tested. Sheep and goats usually were confined, but were apt to eventually find openings in the three- and four-foot spacings. Sheep and goats browsed the foliage, but only the tips of the branches, because the plant is well protected by thorns. Hogs proved the most difficult to hold because of their ability, when not ringed, to root under the arching branches and take advantage of low openings between widely spaced plants. Brood sows and shoats were confined for several days by four- and five-year hedges with plants spaced three and four feet apart.

Spaced at one foot apart, Multiflora Rose fence successfully confined cattle and horses at the end of the second year and this spacing will probably confine hogs in time. The Missouri Conservation Commission says planting six inches apart will positively turn hogs. Multiflora Rose confines livestock primarily by density of the stalks and by its thorns. The drooping rose canes with their heavy green foliage also aids and may prevent the livestock from even reaching the main barrier consisting of heavy, thorny canes.

Albert J. Milde, of Jackson, Missouri, has a mile and a half of Multiflora Rose hedge in various stages of growth, with the oldest being about six or seven years old. He uses it to divide fields and to fence out terrace outlets which he wishes to graze. Milde says Multiflora Rose will turn any kind of livestock except hogs. "In most cases," he says, "it turns hogs, but you generally have a breechy sow that will go through anything."

Milde lives in a soil conservation district that is thoroughly sold on Multiflora Rose. In 1947 the Service furnished farmers in the district with 22,000 seedlings, and in 1948, with 54,000 seedlings.

John Priest, also of Jackson, is another Multiflora Rose booster. "If it would hold hogs it would be a perfect fence," he said. He has a half mile of hedge, set out in 1942, in use as a living fence. He set out 3,000 plants this year and expects to set out 4,000 next year. Priest's hedge has a height and spread of eight to nine feet.

Multiflora Rose is ideal for fencing in small areas, slopes, dips and irregular lines, such as ponds, drainage systems, gullies, ditches, woodlot borders, wildlife areas, and contour ditches, and is recommended as a fireback because there is no grassy growth beneath its branches.

If a farmer has a thought for the wildlife on his farm he will find Multiflora Rose just what the birds and the little animals want. The Rose fence makes an excellent base for strips of Sereca and Korean Lespedeza. This legume cover, which also provides food, together with the Rose offers all that could be desired in food nesting, escape, and winter cover for quail and other farm game.

Farmers say wildlife swarms into the Multiflora Rose hedge. Song birds and quail feed on the hips, or berries, and the shrub furnishes excellent cover. Low nesting song birds like the fence unusually well for nesting purposes, as evidenced by the number of old nests visible after the foliage is gone in the fall.

Old fences which need replacing or extensive repair can be rehabilitated by planting Multiflora. The Rose will fill in the gaps and add its barrier to what is left of the old fence to make a stock-tight line in a short time. The old fence also serves as a protection while the planting is getting established.

The Habits of the Rose

Multiflora grows from seed and to a certain extent by layering. However, it is only

under ideal nursery conditions that the seed will germinate. This is a blessing in disguise for the farmer because plantings do not spread. It does not "sucker" and the density in the fence row comes from new shoots growing directly from the crown. Each year some of the old canes die and new ones take their place. The old and new stalks combine in time to form a dense, matted, forbidding barrier to man or beast.

Occasionally a seed that passes through a bird will germinate, the digestive processes of the bird scarifying the seed enough to permit it to grow. The canes will grow by layering, that is, will take new root if covered with soil along their length. This rarely happens, with the result that a Rose fence will spread only its normal overhang of about four feet from the crown and will confine itself to this space indefinitely.

The root system is very modest and grows mostly downward. Unlike the Osage Orange it does not send out robber roots into the farmer's corn field to suck the fertility out of the soil. The roots are fibrous and will hold soil in an iron grip, preventing washing or erosion.

Multiflora Rose grows rapidly. In three years, on good land, the shrub will form a barrier. On unfavorable sites, it has reached barrier size in four to six years.

It will not make vigorous growth where it is over-topped by trees, and barrier plantings around woodlots should be at a reasonable distance from the trees. It is not recommended for planting next to orchards, because Multiflora Rose and fruit trees are closely related, and it is possible that disease and insect pests common to both might cause trouble, particularly to the orchard trees.

The shrub is easy to transplant and there is almost no mortality when transplanted in a dormant condition. It can be planted in early spring or in the fall. Early spring growth is characteristic, however, and it suffers heavy shock if planted after the buds break. On more porous soils, best results are secured from late fall plantings with mulching. The plant prospers best under a heavy mulch regardless of the planting season.



USCS Photo

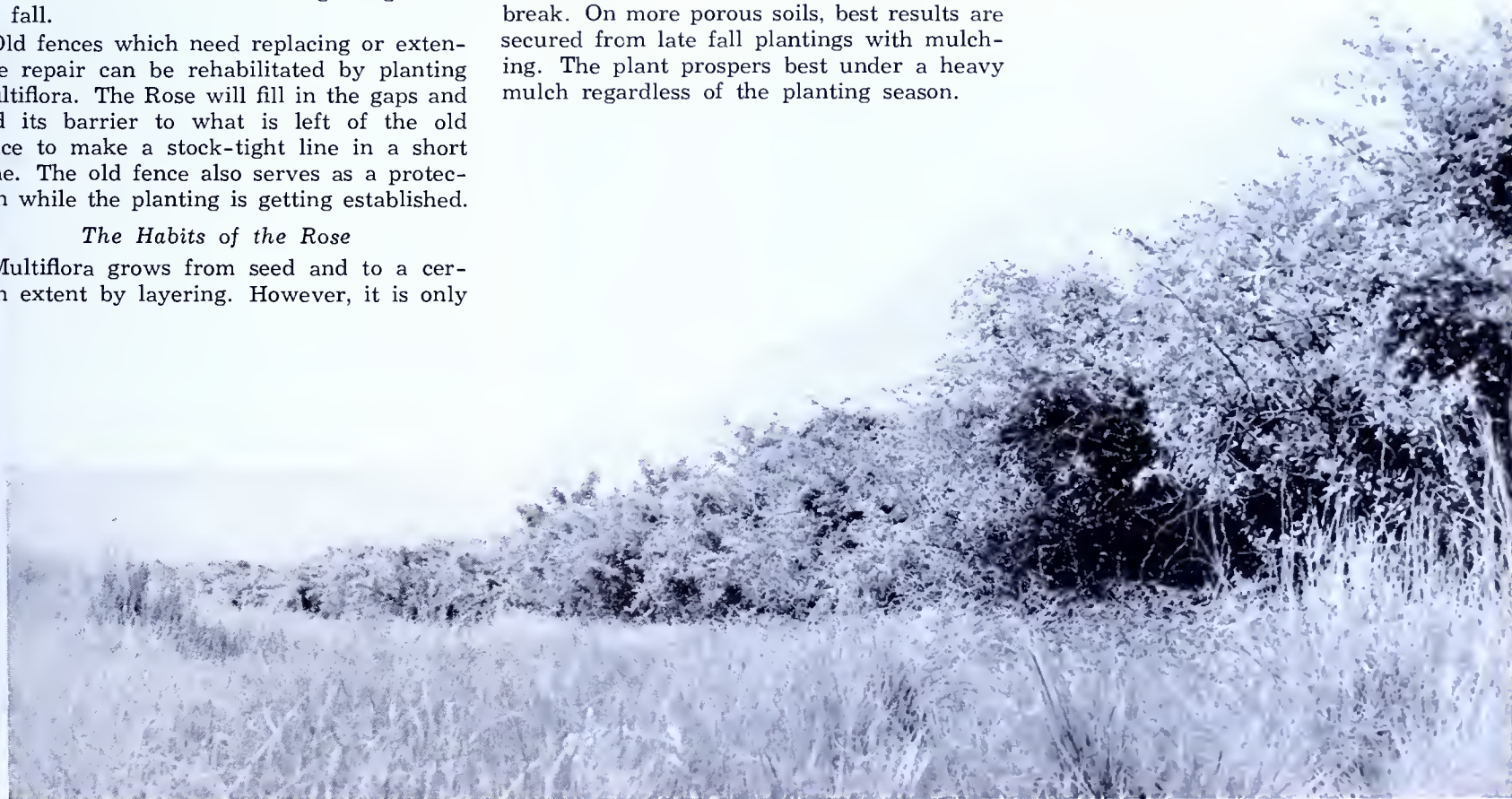
The White or Dusty Pink blooms come out about the same time as other roses.

On the tighter soils early spring planting is best unless a heavy mulch is applied, in which case fall planting is satisfactory.

One year seedlings of Multiflora Rose seem best for planting. They can be produced readily in a nursery at about the cost of black locust seedlings.

For fence plantings to form a livestock barrier a single row with the plants spaced twelve inches apart is recommended. If hogs are to be confined, a low wire fence can be stretched to form a protection for the young plants and at the same time insure against penetration when the fence is established. The best method for ground preparation is to back furrow an eight- to ten-foot strip on the proposed fence line, disc down well, and plant on the back furrow. Seedlings can be hand set against the vertical berm of the furrow, and a handful of dirt pushed against the roots to hold the plant erect. Dirt is replaced by reverse furrowing, and packed by running the rear wheel of a tractor or a

(Continued on Page 22)



Multiflora rose fence on a contour terrace.

Photo by Hesselschwerdt.

PENNSYLVANIA and Venango Grouse Trial Clubs pooled their strength in November to complete one of the most outstanding events in recent years on what are probably the greatest and finest grouse trial grounds in the entire United States. Many more years will pass before grouse dog owners will be privileged to witness the outstanding and sensational handling of the wily grouse as was seen this ideal November weekend. For with the grouse population being what it is today it is no easy matter to train and develop grouse dogs with natural ability to locate, handle and pin "Old Thunder." Fortunate indeed is the man who owns a dog with such rare qualities.

These Grouse Trial Grounds, a combined and concerted effort of the Grouse Trial Clubs in Pennsylvania, the Pennsylvania Game Commission and the Allegheny National Forest are as ideal trial grounds as can be found under natural conditions. They are located in Forest county, about four miles east of Marienville a gateway to big game country in Northwestern Pennsylvania. Here, too, big game hunters are invited to hunt within these boundaries. However, small game hunting is prohibited. On these premises the clubs have personally financed the job of surveying the grounds, purchasing wire, laying out and brushing courses, painting trails and bridging small runs and swamps. Twenty-three, hour length courses are prepared and ready for use. Twenty-three courses so uniform in cover and topography that the luck of the draw has been eliminated. The ground cover is of mixed hardwoods, aspen thickets, blackberry patches and old burned-over pastures sprinkled with wintergreen plants and berries. Here the widest dog can range to his heart's content. Though these grounds be wide in range the canine can still handle the cover and can investigate all likely birdy spots that naturally become second nature to grouse hunters and their dogs.



Hal Harrison Photo
Jay-Rod, brilliant setter campaigner and consistent winner.

PENNSYLVANIA--VENANGO GROUSE TRIALS

By MARC DeBERTI

Despite the fact that grouse have become scarce over mountain ranges, these acres continue to provide sufficient birds to make grouse trial events the best among the circuit. Very few hour courses have failed to produce birds, and the number of birds found, pointed or flushed, range from one bird to as high as nine. Gratifying indeed,

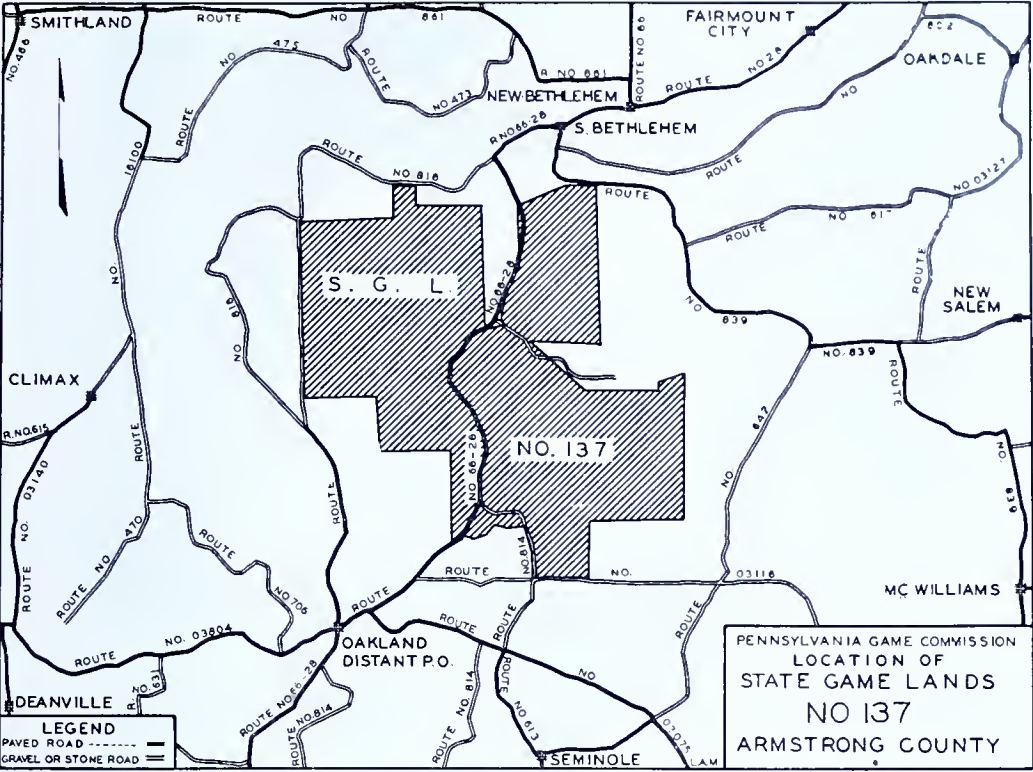
was the number of grouse found, and it is interesting to note what can be done to maintain and increase the grouse population on a controlled shooting area. Brief history of the grounds and general layouts is presented here to give the reader an insight into the recent years' accomplishments of grouse trialers. Now, to proceed with the trial and the winners—

Winner of the Open All Age Stake, and the most coveted placement in this event, was a handsome white, black and tan setter dog, Sam Light's Skyhigh. Here is a setter dog destined to make grouse trial history. Last fall, when Buzzard Swamp courses were used for the first time, Skyhigh crashed through to win first place and the lion's share of a \$1,000 purse. He was barely three years old then. Owned by the popular setter enthusiast and breeder, Sam Light, Punxsutawney, Pennsylvania, Skyhigh is handled by the successful grouse dog trainer, Larry Tuttle, Johnsonburg, Pennsylvania. The dog is strictly a development of Larry Tuttle and the bond existing between the handsome setter and his friend Tuttle is certainly something to behold and admire. Skyhigh came back strong this fall to cop first place at the Black Forest Trial. Through a minor error, he just missed the Lakes States' Championship but was good enough to win first place even if the title was withheld. During the week following, Tuttle took Skyhigh into the extra tight cover of New England where the dog barely missed the coveted title in the New England Championship run. Participating in the Grand National Grouse Championship this November he made a strong bid for recognition, but in spite of a plentitude of

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Hal Harrison Photo
Sam Light's Skyhigh, a setter dog destined to make grouse trial history.



STATE GAME LANDS NUMBER 137

Prepared for the Field Management Bureau

By ROBERT D. REED

Special Services Assistant—Division "G"

STATE Game Lands No. 137, located in Mahoning Township, at the northern boundary of Armstrong County, has some unusual features. Unlike most game lands in Pennsylvania, No. 137 boasts no sizeable timber today. About 25 percent of the 1113 acres that comprise it were once farm land, while approximately 75 percent was cut-over timberland when the Game Commission purchased the property in 1937.

The Bostonia Coal Company once owned this tract and mined it, not only for the bituminous coal that underlay it but for the cannel coal also present, the latter being referred for open grate fires commonly used at that time. A mining village, long since removed, once stood about the center of the present Game Commission holding. This village was built along a dirt road extending between Kittanning and New Bethlehem, now Route 66, a paved highway running on a north-south line that about halves the property. A game lands cabin now rests on part of the foundation that once supported a miner's home. There is a 69 acre refuge located within the eastern segment, one of 37 acres within the one on the west. These havens have played their proper role in the management scheme. Hunters from the Kittanning and New Bethlehem sections have taken rabbits, squirrels, ringneck pheasants, raccoons, grouse, quail, and deer from No. 137 in goodly numbers.

In 1941-42, WPA and NYA labor planted cape cuttings extensively there, pruned apple trees, made slashings to improve ground vegetation, and thinned sapling stands.

Now, about 80 percent of the land is in sapling stage oak, maple, hickory, hazel, wild

cherry, hawthorne, sassafras, and aspen. In recent years, about 60 acres have been cultivated, either on share cropping agreements or through the hiring of equipment and labor, to produce desirable game foods. Beginning this spring, Commission-owned

equipment will do the work. The rotation plan for grains there remains: corn-oats-wheat, with a two-year grass crop between rotations.

In 1949, the 60 acres devoted to grain crops will be established in contour strips, in keeping with modern agricultural practices. Forty additional acres will be cleared this summer for a fall crop of buckwheat. Twenty acres more will be mowed clean of encroaching sprout growth to keep them open for future cultivation and to allow for the planting of beneficial shrubs.

This land is presently in an advanced state of development, as such areas go. Necessary roads, bridges, boundary lines, fences, etc., are established. The emphasis now is on food and protection for game. No. 137 is almost surrounded by township or state roads. Drivable fire trails make all parts accessible in emergencies. The Big Inch right-of-way crosses the land, serving as a firebreak and offering possibilities as a strip on which to plant grasses.

This winter, improvement work on this game land will be: cuttings that will free fruit trees of choking vegetation, apple tree pruning and field clearance for later planting. In the spring, an apple orchard will be planted in a section where now stand only the decaying trunks of apple trees that once produced much game food.

A field adjacent to the orchard furnishes much enlightenment on the values of grasses planted there experimentally by commission personnel four years ago. Orchard grass, fescue, smooth brome grass, reed canary, tall oats grass, birds foot trefoil, and crowned vetch have grown well, have provided nesting sites and winter food and protection for small game species. Nearby, dwarf evergreens such as mugho, juniper

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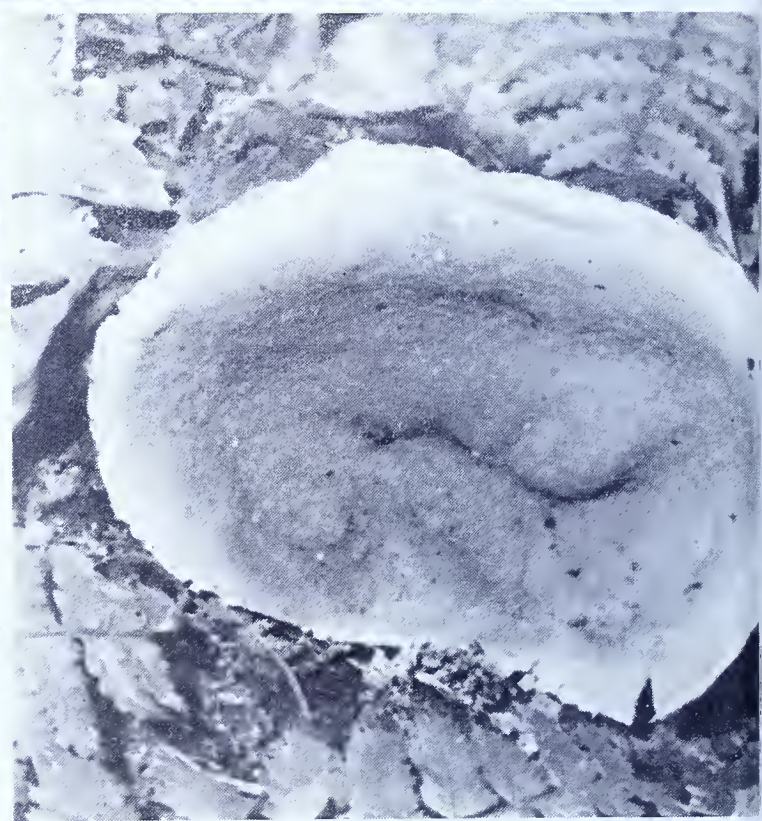


W. J. Brion Photo
Unlike most game lands in Pennsylvania, this area boasts no sizeable timber today.



OUTDOOR KIDS

By HAL HARRISON



"THOSE Scarlet Cups should be right about here," Billy insisted as he and his sister, Jane, kicked over dead leaves on the floor of the woods that bright Saturday in mid-March.

"I remember that Dad and I found a big one near that old stump," Billy continued, "and it was just about this time of year, too."

"If I knew exactly what you are looking for, I might be more helpful," Jane suggested as she followed Billy's example of turning over leaves.

"Don't worry, Jane, you'll know it when you see one. Scarlet Cups belong to the mushroom or fungi family. They are shaped like little cups or saucers and the inside of the cup is the brightest red you ever saw," her brother explained.

"Oh, I'll bet I saw one awhile ago,"

Jane exclaimed. "I think I saw something red in the leaves at the bottom of Trillium Hill. Let's walk back and see."

The children hurried as Jane led the way. She was right! There, sure enough, was a big Scarlet Cup and several smaller ones around it.

"Well, what do you know! We've been hunting for these and you knew where to find them all the time," said Billy, a bit provoked at his sister's failure to report her discovery sooner.

"Pop told us to look for them today," Jane commented, "but I have been so busy trying to find Spring Beauties and Hepaticas that I forgot all about Scarlet Cups. Let's look at them close."

With that the children sprawled on the still-cold ground and examined the brilliantly-colored fungi at close range.

"Do you notice that every one is attached to a stick?" Billy observed. "Dad says they are parasites; that they attach themselves to rotted wood and that they feed through their roots. The roots have a correct name, but I can't remember it," Billy confessed.

"Pop called the roots 'my'—something, didn't he?" Jane ventured.

"That's it . . . mycelium. And he said that the mycelium, the part that's inside the wood or in the ground is the real plant; that the part that we always see above the ground is just like the blossom of a flower," Billy continued.

"You mean that a mushroom is like a flower blossom?" asked Jane.

"Well not exactly, I guess," Billy explained, "but it sort of serves the same purpose. Flowers have seeds but mushrooms have spores. Anyway, it

is part of the fungi that we see that bears the spores and when these spores fall to the ground where conditions are just right they send out their own mycelium and new mushroom plants are started."

"I wonder if these Scarlet Cups are good to eat," Jane pondered.

"I think they would be very tough," Billy answered. "Feel how leathery they are. But it won't be long until Dad will be picking Morels again. Do you remember the Morels we gathered last year, Jane?"

"You mean those brown mushrooms with the wrinkled caps that felt like rubber?" she asked, wrinkling her nose until it looked like a Morel.

"Well maybe you didn't like the looks of them," replied Billy, "but I remember that you ate plenty of them for supper."

"I'd hate to have to decide for myself which mushrooms are good to eat and which ones are not," Jane asserted.

"You should use Dad's system," Billy replied. "He only picks a few kinds and those are the ones he knows are safe beyond a shadow of a doubt. I guess you wouldn't pick any poisonous ones if you were that careful."

"You and Pop can do it in your way, Billy, but when I grow up I think I will buy my mushrooms in a basket at the store. That way, I am sure that I won't have to worry about them," Jane declared.

HEY -- KIDS!

Here's the first in a new series of GAME NEWS feature pages written just for you!

Why not meet Billy and Jane here with their dog, Pal, and go outdoors every month. Let's help them explore the wonders of nature and find hidden nests of song birds, tiny animals hidden in the forest, and even surprises in your own back yards. They'll find hundreds of wonderful secrets of old Mother Nature and they'll be here each month to tell you about them.

P. S.—In real life the outdoor kids are the children of Sylvia and Hal Harrison, well-known outdoor writer, naturalist, and wildlife photographer. Thirteen year old George is an ardent bird student, a leader in his class at school, and an accomplished photographer. Gretchen, his eight year old sister, is equally interested in animals and plants of the wild and even goes



Hal Harrison

in for snake collecting. Pal, their faithful English setter dog, is officially called Puckety Equiflash, and has a pedigree a mile long. When they're not out exploring the woods and waters of our State, you'll find the Harrison's at home in Tarentum.



Black Powder Rifles in Pennsylvania

by E. Stanley Smith

Part IV: Modern Muzzle Loader Matches



TO THE average person today, the mention of muzzle loading rifles usually brings to mind visions of frontiersmen in fringed buckskin, Revolutionary soldiers or early Western Indian fighters and buffalo hunters. Practically no one, even in his wildest dreams, can imagine these ancient arms in use in America in the year 1949. Little wonder, therefore, that the passengers on a crowded bus last summer stared in disbelief at the sight of a middle-aged gentleman seated in their midst, surrounded by muzzle loading paraphernalia and armed with a huge six foot flintlock rifle that threatened to wreak damage on bus and patrons alike with every swerve of the vehicle.

What his fellow travelers didn't know, however, was that he was enroute to a muzzle loading rifle shoot at Shartlesville, Pennsylvania. It is a true but little-known fact that this almost forgotten sport has not only been recently revived, but has also gained nation-wide popularity. Muzzle loader clubs have been formed in all parts of the country, and men and women from all walks of life find new thrills in firing the weapons of their forefathers.

Most clubs are members of the National Muzzle Loading Rifle Association, which has its headquarters in Portsmouth, Ohio. Besides its other activities it publishes a monthly magazine called "Muzzle Blasts" that contains all sorts of articles of interest to muzzle loader fans.

In Pennsylvania the NMLRA is represented by two fine clubs: the Blue Mountain Muzzle Loading Rifle Club of Shartlesville, and the Old Westmoreland Rifles, of Pittsburgh.

According to Mr. Taylor H. Beech, Commanding Officer of the latter organization, this club was organized in January, 1947 and took its name from Westmoreland County, which in its early history comprised what are now seven different counties and parts of two others, and was called "Old Westmoreland." This club's historical background is quite interesting. A regiment of riflemen formed in Old Westmoreland at the outbreak of the Revolution fought with Morgan's Rifle Corps, and although they fought their last engagement at the Battle of Fallen Timbers in 1794 this group was never officially disbanded. Since many members of the present club are direct descendants of those early riflemen it is their desire to perpetuate that historically important organization born one hundred seventy years ago.

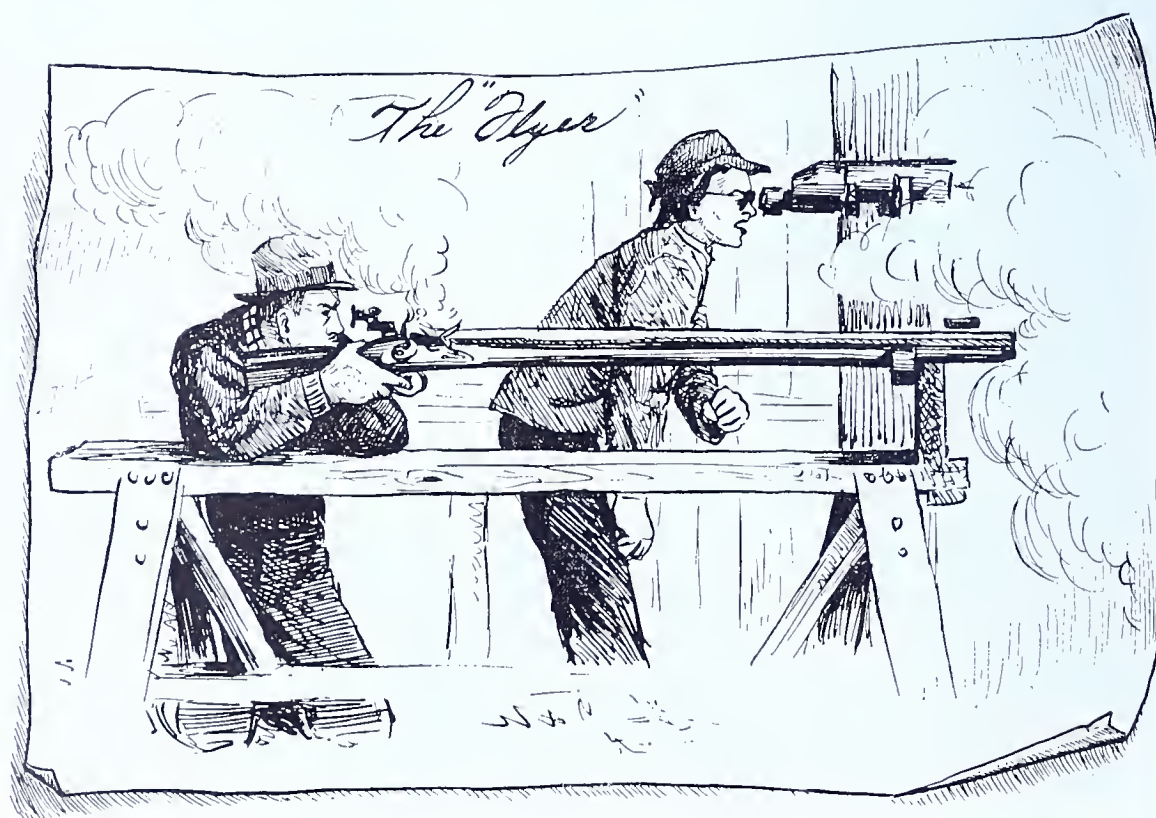
The Old Westmoreland Rifle's first muzzle loader shoot was held May 15, 1947 at the Crowfoot Gun Club, Murrysburg. A live-wire publicity campaign resulted in a gratifying attendance of five hundred shooters

and spectators. Matches were shot at ranges up to one hundred yards. Standard NRA targets were used, and to qualify scores had to be forty-six or better. Marksmanship was surprisingly good and the lowest score turned in was thirty-eight. A unique trophy called the "Club Horn" was awarded to Mr. George Haver of Carnegie, winner of a one-shot match for club members. This was a huge powder horn made from the horn of a Texas Longhorn steer and engraved with the name of each year's winner.

In 1948 the club constructed its own range; the Capt. John McMasters range, at which bi-monthly shoots attract a large and regular attendance.

Local interest in antique firearms was later responsible for the founding of the Pennsylvania Gun Collectors Association, an off-shoot of the rifle club. This group's present membership is over one hundred and its aim is to establish shooting and collecting groups in all parts of the State. The last meeting and exhibit was an outstanding affair patronized by 1000 visitors who had the time of their lives examining, admiring and discussing the fifty-thousand dollar display of more than one thousand guns.

In all its activities the Old Westmoreland





*Sketches from Shartlesville
1948*

Rifles retains a geniune appreciation of the men and weapons of early Pennsylvania that aided America's bid for liberty. Its interest in muzzle loading rifles is primarily historical and the tradition of the border fighters and their feats is faithfully preserved.

In contrast to this atmosphere, the chief interest of the Blue Mountain Muzzle Loading Rifle Club, of Shartlesville, is actually firing the guns, with little emphasis on historical interest. Many members of this organization are accomplished gunmakers; consequently, although original antique Pennsylvania rifles are in evidence, Twentieth Century flintlocks and percussions are far more common at their shoots.

This club was officially organized in 1939, but a local group had been holding informal shoots at the homes of various shooters for more than thirty-five years. Before its organization this group numbered about fifteen shooters. In their earlier matches all contestants fired at the same target, a black board with a white bull's-eye. Only one shot per shooter was allowed and the one

Their shoots are now quite popular contests, and attending one is an education as well as an entertaining experience. Let's take an imaginary trip to a shoot at the range of the Blue Mountain Muzzle Loading Rifle Club and I'll show you what I mean.

Our first surprise as we pull into the parking lot is the number of out-of-state cars. License plates from Maryland, District of Columbia, New York, Ohio, Indiana and others offer proof of the enthusiasm of dyed-in-the-wool black powder fans.

Under the sheltering roofs on either side of the little frame club house are the bench rests and loading benches of the fifty and



Offhand matches



The Loading Bench



who placed his shot nearest to the center was the winner. Naturally, the tremendous increase in membership following organization of the club automatically dispensed with this form of shooting, as the targets became so riddled that accurate scoring was impossible. Standard NRA fifty and one hundred yard targets were then adopted.

one hundred yard ranges. Although the edges of the loading benches are notched to hold the guns in position for loading their chief function seems to be to hold the strange assortment of gadgets, jimcracks, balls, patching, tools, equipment and just plain junk with which most muzzle loader shooters burden themselves. Black powder fans make, buy and collect these "essential" items with glee second only to that of a plug-buying fisherman.

An examination of some of the shooting gear will disclose many surprising likes and dislikes, some personal and others quite general. For instance, although metal flasks and cannisters were considered improved containers for powder a substantial number of modern shooters swear by the powder horn, maintaining that it keeps the powder in better condition.

The newly invented gadgets are legion. One of the most popular is the combination charger and funnel which prevents spilling any powder. The two parts are hinged together and after the charger is filled it is merely inverted and the charge is dumped into the funnel.

Loading methods vary considerably. For instance, many shooters keep a jar of water handy with which to moisten their patches. Others declare there isn't a better lubricant than good old-fashioned saliva, and accordingly are frequently seen masticating a piece of linen patching. Tastes also vary widely concerning bullet starting. One shooter thumps the starter with the palm of his hand to drive the ball into the bore, while another uses a small wooden mallet or a light tack hammer. The pay-off is the

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Two dogs clawed to death by strange monster! The poor canines were owned by Luther Gaston and E. C. Willard of Canoe Township who reported the animals to have been teathed to death by a panther-like animal. Raymond Winebard and his son discovered the dead dogs on their farm near Locust Station. When found the animals were a sight to behold with four claw marks down each side of their stomachs and with badly cut throats. Just to prove the sharpness of the attacking animal's teeth, one dog's leather collar had a tooth mark almost running through it.

Many reports have reached my ears about these unwanted strange animals. Mr. Winebard told me of having seen two animals about two weeks before the dogs were discovered. These animals were described as being five feet long, long tailed and dark in color. They looked and acted like a large cat or panther. These strange beasts were seen within 200 yards of the Winebard buildings but did not bother Winebard or his possessions. Four hunters reported seeing one of the panther-like animals hunting mice in a field. The animal was easily frightened when one of the hunters fired a shot into the air.

Ernest Henry, Indiana, told me of having come across an animal last summer that looked like a lion and screamed to the high heavens each time it stopped walking. Then there was another report from Howard Layton, Indiana, who described to me how a catlike animal tried to get his tractor while he was drilling wheat one night about 10 P. M. Several people have reported weird

screams which come at night and which are enough to make a person's hair stand on end. Between Indiana and Canoe townships, a distance of approximately twenty miles, is the section from which these reports usually come, although a few warnings of animal screams have come from three adjacent townships. No one has been able to locate the mysterious hideout of these unusual four-legged creatures. It is believed that they are in the scattered sections of the upper part of the county but one has yet to discover their large tracks in the snow or mud.

Every fall for the past three years residents of Canoe have reported the weird scream of this heartless beast.—Game Protector A. J. Zaycosky, Indiana.

Checking beaver dams for traps one day while on patrol, I saw a grouse attempting to fly but unable to get off the ground. Upon closer observation I noticed its broken wing tip. Picking up the bird, I cut off the broken part of the wing; and put the fellow back on the ground which was covered with snow. The bird fluttered around but did not make any headway in the snow. Puzzled as to just what to do with it I finally put it in the back of my hunting coat and took it home with me. I put it down on the kitchen floor and it fluttered around soon to find a hiding place in the bottom of an open cupboard. My wife said it stayed there all afternoon. We had made arrangements to go out for dinner that evening and I figured the bird would stay put. Upon returning about an hour later we found our grouse in the parlor. It had been feasting upon an African Violet that Mrs. Bill had just received a few days previously for a birthday present. The price of African violets, I do not know, but you can just bet that I'm going to find out very shortly. I think he will have been a pretty expensive guest, but costly or not it is one way of finding out what grouse like to dine on in the winter.—Game Protector William Overturf, Marienville.

January 10, 3 A. M. I received a call from the Pennsylvania railroad roundhouse crew to come and see what could be done in helping them rescue a doe deer from the turn table pit. When I arrived on the scene

there was the doe walking around surveying its unhappy surroundings. The only person who might realize such a situation is the fellow who has tried to catch a healthy deer inside a large railroad turn table pit in which there are no corners for trapping anything. Round and round, in and out went that deer right through the hands of six pursuers for no less than forty-five minutes. Twice during the hard struggle we managed to get ropes around this wiry animal and get it outside of the pit only to have it twist itself free and jump back into the trap. Not less than five times during the chase I started to reach for a gun that would end it all, but for some unknown reason I just didn't have strength to lift that weapon. Finally, one fellow made a flying tackle around the animal's neck and brought it to the ground where it was too exhausted to even kick back. We carried the animal several hundred feet from the railroad tracks and laid it down. It panted for a good ten minutes before it got up and trotted away to the cover of darkness. A struggle of five minutes more may have resulted in shooting the deer because the railroad crew had five minutes left to get an engine turned on the turntable so it would be ready for the morning passenger train.—Game Protector Norman Erickson, Emporium.

Clyde Canouse, Milford, who owns a tract of land in Lackawaxen reports that in January, while standing on a rock embedded in his property, he heard peculiar noises. Thinking procupines were under the rock, he investigated to find a black bear in hibernation. The grizzly fellow weighed about 200 pounds. Later he heard the cubs nursing and squealing. On the John Fields property, Milford, there is another bear in hibernation. It is believed to be a female bear, but so far, we are not sure whether there are any cubs in the den. The whole matter will be investigated thoroughly at a later date.

Deer are coming into the food placed out for them. At one feeder three varying hare are partaking of the apples donated for game food by Wy Helms, Milford.

Red-tail and red-shoulder hawks have stayed over this winter on the river flats. These birds are protected species, but when they stay along the river flats they turn out to be rabbit killers.—Game Protector J. H. Lohmann, Milford.





While releasing rabbits in West Pottsgrove, I chanced to drive along a dirt road, on the left side of which there was a house which was situated about forty feet from the road. Between the road and house was a dog box to which was fastened an Irish Setter. I noticed the setter was on the point looking across the lawn. In a clump of hedge, about 15 feet from the road, I saw a Cooper's hawk walking back and forth. I stopped the car at the hedge. When the hawk took off I got out of the car and investigated the thickly grown hedge to find that the only thing that took off was six English Sparrows. The hawk was trying to get the sparrows out of the hedge and the setter was pointing the hawk. Never have I seen this kind of action before.—Game Protector Richard E. Blain, Pottstown.

Recently I received the following request for feed:

Mr. and Mrs. Sciurus Carolinesis and four grown children have adopted me to say nothing about twenty families by the name of Glaucomes Volans who are permanent house guests, and the scarcity of food being what it is, I thought perhaps you might wish, in the kindness of your heart, to somewhat alleviate a condition which is rapidly growing more and more critical. Your cooperation will be sincerely appreciated.—Game Protector Edwin W. Flexer, Quakertown.

How many of the hunters who shoot first and look afterward would be quite so quick on the trigger if they could see some of the after effects of their carelessness, I wonder.

A few weeks after the close of deer season a member of the highway department informed Game Protector Rodehiero and me of a wounded doe. We investigated and found the deer half hidden under a hemlock tree. It had been shot through the hindquarters and evidently had managed to crawl only a few yards from the scene of the shooting. Both legs were pitifully mangled. After a more thorough examination we concluded that it had been shot during the open season. How it managed to live that long in such sad condition was amazing.

If the hunter responsible for this wanton act could view his handiwork—I wonder if his conscience would permit him to sleep for a few nights.—Game Protector Stephen Kish, Moosic.

Boldly a Cooper's Hawk has been making several raids on a flock of pigeons near Burgettstown. After having had several of these pigeons killed within seventy-five yards of his residence the owner became irate and kept his shotgun within arm's length just in case the hawk should return again. Upon three different occasions he shot at Mr. Hawk while it dived after the pigeons. All in all he shot three of his pigeons and the hawk is still going along at full speed.—Game Protector G. A. Kitchen, Canonsburg.

Twenty weasels to probate for bounty were brought over to my office by C. Devore. It was during December that the greater part of the catch had been made. Devore said it is much easier to catch weasels on the snow than on bare ground because then the traps are not bothered so much by mice and opossums.

According to Devore's way of thinking the large white weasel does the most damage to rabbits when snow covers the ground. He cited one instance of tracking a large white weasel and later catching him to find that five rabbits were killed by this fellow in one night. The weasel's color camouflages him on the snow, thus the rabbits were attacked without warning and had little chance to escape.



Evidence of the damage done by the weasels was above ground and easy to see. It is impossible to determine or estimate the amount of game that it killed by these bloodthirsty weasels in woodchuck holes and underground burrows.—Game Protector Elmer D. Simpson, Cambridge Springs.

Ed O'Dell, New Germantown was hunting woodchucks last August when he spied a red fox coming toward him on an old woods road. Thinking his dog might frighten away the fox O'Dell did not try to outwit the animal. When the fox got within 150 yards of the hunter, the animal turned off the road onto an old field. Having found the place where the fox left the road, the sportsman noticed along the edge of this old field, much to his surprise, a spike buck trying to gore the red fox. The buck would make a pass at the fox; the fox in turn jumped to the side. Then the buck would try another pass and the fox again jumped to the side. One shot from O'Dell's 25-20 Winchester rifle ended the battle for the fox. The buck scampered away feeling he had done his good deed for the day.—Game Protector Harold E. Russell, Blain.

A few days ago I found a dead grouse near a shed at the refuge. When I examined it for the cause of its death I discovered that it had flown into the building. Neck and beak of the bird were broken. This is not unusual as these creatures often fly into a window or the inside of a building. What seemed unusual to me was the force with which this bird hit the building. Having flown into a white door, it hit one of the cross panels and split it all the way across. It was even pushed in, nearly one quarter of an inch. Never realized these birds would hit with such a terrific amount of pressure!—Game Protector Clyde W. Decker, Philipsburg.

On January 8, I had a most interesting, though at times exasperating experience with a grey fox. Several days before, I had picked up a grey fox in Mercer County intending to take it to the Erie Zoo from where it could later be used by us for exhibits. This particular fox has been in captivity since about six weeks of age. On the aforementioned date I placed the animal in a crate, collar and chain attached, then put him in the trunk of my car. A few minutes later I discovered that the cunning fellow had worked his way out of the crate and was loose in the trunk. Thinking that the chain was still attached I opened the trunk and to my astonishment the fox took off. Luckily there was a tracking snow and after an hour and a four mile hike, I was able to catch the fox tangled up in some brush. Believe me, this fox did not lose any of his cunning while in captivity. After finding freedom, his first objective was a field of brush; then, through a large woodlot of mature timber. All the time he was careful to travel where the going was easy and at top speed. He was not slow in deciding to travel over bare ground in order to throw me off his track. Having traveled for about two miles he decided to put other tricks to work such as back tracking and circling over his old tracks. Unfortunately for the fox, his chain got caught in a brush and fortunately for me, I was able to catch him. On the way back to the car he proved how well a grey fox can climb trees. Once he climbed a ten inch oak; at another time he went up a six inch maple. He's safe now, in the Erie Zoo.—Special Services Assistant James A. Brown, Oil City.





TRAINING THE GUN DOG PUPPY

By HERBERT KENDRICK

AFTER the puppy is selected and delivered to you and before his serious field education is begun, there are a few things he should be taught at this very early age. The most extreme care and greatest patience should be exercised in these simple tasks lest the little prospect be robbed of his boldness, spirit, and self confidence. Although everyone loves to see a dog's pointing instinct assert itself soon after his mother has ceased feeding him, and there are few pictures more glorious than the youngster freezing at point on a robin, grasshopper, or butterfly, his ability to absorb field training in a serious manner is very limited and any attempt to force him will result in much more harm than good.

Many modern trainers contend yard training is unnecessary and a definite waste of time, and wait until the dog is from twelve to eighteen months of age before training of any kind is started. This method is employed by many handlers of dogs used for field trials where speed, endurance, and extreme boldness are desired. However, in schooling a shooting dog prospect the best time to start is about the time of his first birthday. In some cases where the animal is slow to develop the training may be started later, thus making it of a more permanent nature. There are young dogs doing excellent work in the field—handling game, backing and retrieving before they are a year old. However, these are rare cases, and rarely do they show any improvement over the puppy stage, and too often develop into a worker who performs in a lifeless, methodical manner and loses the fire and heart gunners like to see in their dogs.

While the young puppy is developing in mind and body, and feels that his life is just one day of fun after another, it is advisable to let him know the joy of performing simple tasks for his master. These may be accomplished without applying force, thereby eliminating the possible danger of overcrowding him. Teaching the youngster requires a deep understanding between the handler and his pupil, based upon love and confidence. When a pup loves and believes in his master, teaching is greatly simplified.

Start the series of training events with housebreaking. Even if you plan to have your dog live outdoors, you will find it wise to bring him inside long enough to make sure he is housebroken. At the first sign of restlessness you feel is caused by need of relief, call the pup quickly outside, and stay with him until the desired result has been accomplished. Then give him a kindly pat of approval and allow him back into the house. He will soon get the idea. If he should slip, take him to the scene of his crime and buff him with a lossely rolled newspaper.

By all means teach the young dog to heel. Get a very light limber switch, call the pup to your side and start for a walk. Command him to "heel." Speak firmly, and use the same word at all times. At first he will not understand and will want to

(Continued on Page 26)

THOUGHTS ON LEAD

By TED TRUEBLOOD

ONCE, when the limit was ten a day, my brother, my wife and I were sitting in a duck blind. My brother and I had killed our birds. My wife had four to go. She was having trouble hitting them, and we were dishing out advice.

A duck would fly over and he would say, "Lead him three feet." I'd say, "Lead him six."

Now each of us had used less than a box of shells to kill his ten birds. That included finishing cripples. Anybody who has done enough duck shooting to know what duck shooting is will tell you that we did pretty fair. If you can beat one out of three you are doing all right. This means taking them as they come, of course, and not letting them light among the decoys and shooting on the rise.

Yet my brother apparently led his ducks only half as far as I did mine. I advised twice as much lead every time as he did. How come? We finally left my wife to hit her ducks as best she could and tried to figure it out. The conclusion we reached was this:

He is a very fast shot. I have seen him hit a quail ten feet above the cover, realize that it was crippled and kill it with the left barrel before it disappeared. There aren't any bugs in your reactions when you can do that. My shooting is more deliberate. We concluded that his faster reaction, coupled with a faster gun swing, made him use less *apparent* lead.

He swung from behind his ducks and fired after the muzzle of the gun was ahead of them. I swung with each bird, pulled out ahead and fired when I thought I was right.

Now, when two hunters sitting side by side in a blind can't agree how much lead to use on a passing duck, how in the world are you going to tell anybody in print?

I don't think it can be done. I believe every hunter has to find out for himself. I do believe, however, that it is possible to make some suggestions that will help him find the right answer.

There is an infinite number of variables that affect lead in upland bird and waterfowl shooting. In addition to the example already given, there is the inescapable fact that never in a season—and probably never in a lifetime—will you have any shot that is exactly like any other shot. They're all different. Even if you limit it to ducks, they're different, and if you include upland birds the number of speeds, angles and ranges and combinations of all three are increased a thousand fold.

What good does it do to read that a load of shot travels 1120 feet a second, a quail 41 miles an hour, and to hit that quail at 30 yards a lead of 4½ feet is required—if it is? I've never figured it out because I think such information is misleading and worthless. Yet I've seen tables that contain just such bunk. I imagine they were figured out by some bozo who had shot a duck.

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New Device Controls Beaver Pond Levels

A simple yet ingenious method of controlling the level of waters backed up behind beaver dams has been developed by Research Technician Roger Leighton of the New Hampshire Fish and Game Department, the Wildlife Management Institute reports.

To hold beaver-impounded waters at a static level, Leighton hit upon the idea of inserting a four-inch fiber drain pipe through the dam at the desired height. To prevent the fur-bearing engineers from plugging the bore of the pipe with sticks and mud in their usual manner, Leighton perforated the entire wall of the outlet to make an unpluggable sieve. Three months of testing the method in the Granite State showed that it is highly effective in preventing beaver from flooding valuable agricultural or forest lands. Through its use, water levels may be maintained at a constant level best suited to the needs of trout and for flood control without disturbing the beaver.

Soil Conservation Puts Cash into The Treasury

Soil conservation districts which have carried out plans developed by the S.C.S. increased their 1948 income by approximately \$245,000,000, the Wildlife Management Institute learned from the Department of Agriculture. This increased revenue would yield Uncle Sam nearly \$70,000,000 on the basis of present income tax laws.

Each of the 344,827 treated farms, averaging 290 acres each, earned enough additional income to pay an estimated \$103 more in income taxes than did similar untreated farms. A total of \$35,517,181 in additional revenue can thus be traced directly to the use of soil conservation measures. This tax is paid directly by farmers, but their increased income provides other sources of revenue such as increased retail trade and an additional volume of products to be handled by wholesalers, processors, and distributors. The extra tax revenue paid by farmers as the result of their soil conservation work and by retailers, processors, and distributors, who profit by the extra business, would total an estimated \$69,192,185.



R. D. PARLAMAN

The resignation of Bob Parlaman, special services assistant in Division "B," was announced recently. Bob left his post on March 1 to return to his home town of Reading where he will join his father in business. He joined the Commission in 1935 as a deputy game protector and following graduation from the training school in 1937, became a game protector in several western county districts. He served as resident instructor at the school in 1945-46 and was assigned to handle the Commission's conservation education program in northeastern Pennsylvania in 1947.

FINAL REPORT—1948

PENNSYLVANIA GAME COMMISSION

Game Killed in Pennsylvania

Species	Average Wt. of Ea.	Season of 1948* Number	Season of 1948* Weight	Season of 1947* Number	Season of 1947* Weight
Deer, Legal Antlered	115 Lbs.	33,608	3,864,920 Lbs.	31,475	3,619,625 Lbs.
Deer, Legal Antlerless	80 Lbs.	.....	.....	63,568	5,085,440 Lbs.
Total Deer and Weight ..		33,608	3,864,920 Lbs.	95,043	8,705,065 Lbs.
Bears	175 Lbs.	388	67,900 Lbs.	569	99,575 Lbs.
Rabbits	13 ¹ / ₄ Lbs.	1,791,550	3,135,212 Lbs.	1,829,843	3,202,225 Lbs.
Hares (Snowshoes)	3 Lbs.	5,616	16,848 Lbs.	5,518	16,554 Lbs.
Hungarian Partridges	12 Oz.	43	32 Lbs.	96	72 Lbs.
Squirrels	1 Lb.	564,873	564,873 Lbs.	658,787	658,787 Lbs.
Raccoons	10 Lbs.	98,242	982,420 Lbs.	91,912	919,120 Lbs.
Wild Turkeys	10 Lbs.	4,318	43,180 Lbs.	3,751	37,510 Lbs.
Ruffed Grouse	1 ¹ / ₂ Lbs.	24,297	32,396 Lbs.	29,922	39,896 Lbs.
Ringneck Pheasants	23 ³ / ₄ Lbs.	277,254	762,448 Lbs.	220,814	607,238 Lbs.
Quail	6 Oz.	5,780	2,168 Lbs.	8,360	3,135 Lbs.
Woodcocks	6 Oz.	26,210	9,829 Lbs.	20,263	7,599 Lbs.
Rails, Gallinules & Coots ..	4 Oz.	3,960	990 Lbs.	4,061	1,015 Lbs.
Grackles (Blackbirds)	2 ¹ / ₂ Oz.	(Unprotected—No data)	(Unprotected—No data)	35,914	89,785 Lbs.
Wild Waterfowl	2 ¹ / ₂ Lbs.	40,352	100,880 Lbs.	234,017	1,404,102 Lbs.
Woodchucks	6 Lbs.	259,534	1,557,204 Lbs.	6,868	1,288 Lbs.
Doves	3 Oz.	6,847	1,284 Lbs.		
Total Number and Weight		3,142,872	11,142,584 Lbs.	3,245,738	15,792,966 Lbs.
Reduced to Tons Equals			5,571 Tons		7,896 Tons

* Small Game, based on Field Officers estimates; Big Game, based on individual reports filed by hunters.

New Directory of Wildlife Protection Organizations and Officials Published

Names and addresses of more than 400 wildlife protection organizations are listed in Wildlife Leaflet 313, published recently by the Fish and Wildlife Service.

Copies of Wildlife Leaflet 313, *Organizations and Officials Concerned with Wildlife Protection (1948)*, can be obtained without charge from the Division of Information, Fish and Wildlife Service, Washington 25, D. C.



Chow time at the school means the best in home-cooking for the student officers.

EARLY last October all of us were sent into the field to work with various Game Protectors along pre-season enforcement lines. As in all previous instances we were sent to a district and division of the state which was entirely new to us.

This was the first law enforcement experience for the majority of us. Our initiation into it only tended to increase our love of the job we have chosen for our life's work. Not only was this the most valuable part of our year's work, but a chance to view in actual cases the workings of the classroom theories.

Each of us had the opportunity of being in small game territory before and during the first half of the season. Then we were each transferred into sections of the state, noted for a bear population, on November 12th. There we remained until the close of the deer season; as in nearly every case the bear country coincides with the deer territory. The system of having each student officer work with and under the supervision of two or three different Game Protectors, in entirely different parts of the state, affords the student officer the chance to absorb all the good points of each salaried officer, which will, no doubt, stand him in good stead as he goes into his own district as a game protector next June. Experience is still a good teacher; and not to be slighted.

The two visiting students from the State of Washington were especially interested in our small and large game seasons, in that the hunters and ways of hunting differ so much here from Washington. One of these men, Mr. Hemstreet, returned to Washington during the Christmas vacation because of the need for him in his home state. Mr. Maxwell has remained to finish out the year's training. He also has given us some constructive criticism as well as complimentary praise in regards to the way our department operates.

At the termination of the recent field trip, we were permitted to spend some time at our homes previous to Christmas. We returned to the school on December 26th and resumed classes that evening.

The Game Commission, the school staff,

and especially the members of this fifth student class, were very fortunate that Professor John F. Lewis, Biologist and Conservationist, of the staff of California Teachers' College, California, Pa., was kind enough to sacrifice his Christmas vacation to present a winter twig identification course to us. The reason for having a course of this nature, as was the summer leaf identification course previously presented by Professor Lewis, is that the men who are graduated from this school, of necessity, must know the various woody plants or shrubs that provide the food for either large or small game in the eastern section of the United States.

STUDENT NOTES

The Ross Leffler School of Conservation By DEAN M. LESNETT, SR., Class Historian

Professor Lewis presented his course untiringly, nine hours a day. There were many times during the week that we wondered if it were humanly possible to learn the identifying marks and characteristics of the one hundred twigs in one week. New Year's Day was the day of the final test. Nine hundred (900) points constituted 100%, which no one attained; but, two men namely, Samuel McFarland of Reading, Berks County, and John Behel of Lewistown, Mifflin County, did make 899 points each. No one scored lower than 860 points. According to Professor Lewis and the Conservation School records, this Fifth Student Class has surpassed any record set by previous classes on this test and also had fourteen extra species of plants added to the test.

We all appreciated having District Game Protector Paul Failor, from Mount Pocono, here to present a week's course on the identification of furs and the various methods of winter trapping for the beaver and other fur-bearing animals of Pennsylvania. This course was very interesting to every last one of us and will be of great benefit to any of us who are assigned to districts in the state where there is any amount of trapping for fur-bearing animals. Mr. Failor gave us many tips that will come in handy in the line of preventing unnecessary accidents in the winter woods and on the lakes and streams, during the trapping season's work.



Almost a year has passed since the school instructors greeted students on their way to becoming well-trained Game Protectors.

CONSERVATION WEEK—

from page 3

Commissions—the Game Commission and the Fish Commission. Their expenses are paid out of John Jones' license money, and not out of tax money. John Jones also taxes himself voluntarily—believe it or not—with a national tax on firearms. Pennsylvania receives its share of that tax, and every cent of it is spent for game restoration.

John Jones even buys land to make sure he has a place in Pennsylvania to hunt and fish. Part of his license fee is set aside for just such purchases, and today John Jones owns outright some eight hundred and sixty thousand acres of hunting ground, and controls enough more to bring the total to almost one and one-half million acres. Actually, John Jones doesn't own it, though—you own it, too. You see, John Jones bought it with the understanding that it was to belong to the State—that means you—open at all times to hunting or public recreational use. It's a million and a half acres from which you won't be kicked off when you go hunting.

A part of that land is set aside by the Game Commission as game refuges or propagation areas. No hunting ever is allowed there. This makes certain that the game will never be killed off entirely even on public grounds, but will always have a place of refuge and a place to breed and increase.

Every week is conservation week with the Pennsylvania Game Commission. Let's see what John Jones' Commission did in 1948 with all-year-round management of wildlife. In the first place, it spent nearly three millions of John Jones' dollars to improve wildlife conditions.

The Commission used part of that money to enforce the game laws—and it collected \$192,000 in fines from law violators. No one is going to steal John Jones' game if the Commission can help it. Not even predatory animals are going to steal it without a fight, because the Commission paid out more than \$158,000 in bounties on predators. Predators are animal thieves of animal life.

The Commission's four State Game farms—owned by John Jones, you know—raised game for stocking. The Commission bought game for stocking as well. And it stocked more game in 1948 for John Jones' hunting than it ever did before—88,592 pheasants, 12,491 quail, 5,499 wild turkeys, 37,000 cottontail rabbits.

It brought the total of acres in Cooperative Farm-Game Projects to more than 600,000. John Jones needs land on which to hunt small game and farmers own most of it. Through the Commission's efforts, the 600,000 acres in Farm-Game Projects are open to public hunting.

The Commission's agents planted food plots on State Game Lands, and it helped farmer members of Farm-Game Projects plan contour planting to aid the farms and their wildlife. It cut timber on Game Lands to improve wildlife conditions—and cleared a tidy \$79,000 from the timber sales. It built roads and fire trails on John Jones' Game Lands. It helped feed wildlife in



winter emergencies. It started, or cooperated in, wildlife studies. It tried to help John Jones follow the rules of safety in hunting. It enforced the songbird laws.

And it tried to reach persons such as you, who may or may not hunt, through its conservation education work. It tried to show you how wildlife is being managed in this State for your benefit as well as John Jones. You see, you may not realize it, but you own that wildlife as well as John Jones. His money helps produce and maintain it, but the Commonwealth as a whole owns the game. It belongs to everyone.

Such management over many years has put Pennsylvania in a peculiar situation. It is a mining, agricultural and manufacturing State, yes. But it is also the Number One big game State of the nation! That may come as a surprise to anyone used to thinking of far western states as big game country. Pennsylvania owes its top position to its huge deer herd and abundant black bears. The deer herd has been estimated at about 750,000 animals. Each one is worth \$100 to the State—the herd is worth 75 million dollars! And it belongs to the Commonwealth, it's part of our real wealth.

In this observance of Pennsylvania Conservation Week, John Jones doesn't ask for any contributions or anything like that. But he would be glad to see a better understanding and appreciation of the wildlife in his State and in the nation. He knows how important it is.

Conservation Week arrives at the right time, the beginning of the outdoor season. You'll see John Jones moving outdoors now, and you might as well go along with him and see what wildlife this State of yours holds in trust for you.

STATE GAME LANDS 137—

from Page 9

and yew, beneficial for their protective qualities, evidence their adaptability to the region.

Heartening to the old-timer and beneficial to the game species are the many worm fences that bound the fields. Along these fences may be found occasional evergreens intermixed with a plentitude of briars. In due time, food and protection benefits resulting from last year's planting of multiflora rose seed along them will be realized.

In locations that lent themselves to the game lands improvement pattern, hawthornes, viburnums, honeysuckle, barberry, bittersweet, and osage orange were planted. About 100,000 evergreens—Norway spruce, banks pine, Scotch pine, white pine, and dwarf evergreens—were planted on spoil banks, steep slopes and in old fields unsuitable for cultivation. They now show satisfactory growth in varying heights. In places the evergreens are clumped to offer greater winter protection to game; some are spaced as forestry practices suggest; still others offer travel lane protection to wildlife crossing otherwise open fields; and many mark boundary lines and road edges.

Truly, Armstrong County's Game Lands 137 differs greatly from Pennsylvania's usual-type rugged, timbered areas of the same classification. This land's desirable features are recognized. They are being fully developed in the interest of better hunting.

P. S. (THEY GOT CAUGHT)—

from Page 4

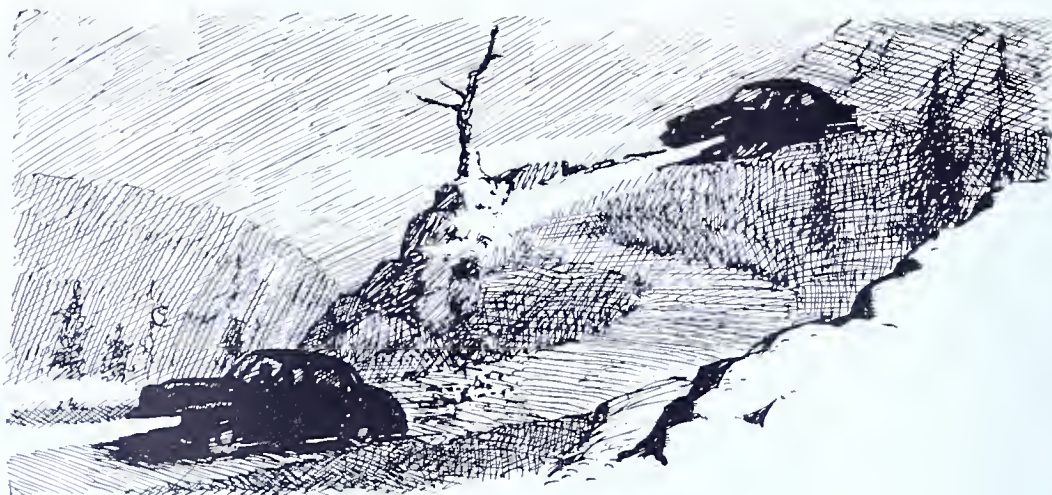
Legal barriers, particularly those of geographical jurisdiction between states, are unfortunately a serious problem to be reckoned with in game law enforcement. To preclude any "tip-off" between residents and non-residents, who in a number of instances in this case proved to be in close alliance, priority attention was focused on the arrest of the nonresidents involved. "Judgment Day" was set for December 1, 1947, but little did we realize that before we reached our objective the nonresidents were to give us a bag full of trouble, and all of it bad.

To accomplish our purpose, detailed surveillances of several days duration in early September were made of the three principal nonresidents for whom process had been secured: Frank P. Wagner, 47, of Elizabeth, N. J., who was wanted for attempting to kill a deer through the use of an artificial light in close season (December 1, 1946); Michael Guthrie, 29, of Linden, N. J., who held the light for Wagner on the night of December 1, 1946, and who had for two successive years been unlawfully obtaining a resident hunter's license; and Michael Sotak, 27, also of Linden, N. J., suspected of unlawfully purchasing a resident license in 1946.

The surveillances furnished much valuable information regarding the personal habits, hours of employment, ownership and use of automobiles, and similar information which is so vital in an operation of this character. Optional highways between the homes of the defendants and Lords Valley were studied with the discovery that there were three principal roads entering Pennsylvania, any one of which could be used; Portland in Northampton County, Matamoras and Dingmans Ferry in Pike County. Two of the defendants, Wagner and Guthrie, each owned automobiles; hence either car might be used on their next visit to Pennsylvania. This complicated our problem. Information reached us that none of the trio intended to return to the Lords Valley district to hunt in 1947, but had made plans to go "elsewhere" in Pennsylvania. It was the "elsewhere" that stumped us considerably.

Final preparations were completed to effect the arrests. Warrants were handed to the officers, together with instructions to place the homes and places of business of Wagner and Guthrie under surveillance beginning November 30, 1947. The subjects were then to be followed into Pennsylvania and arrested.

Events followed swiftly. Late in the afternoon of November 30, 1947, Wagner and Guthrie were observed by the officers to leave



Linden, New Jersey, in Wagner's 1941 black Buick sedan, bearing New Jersey registration plates UF 45 J. Both men had placed hunting clothing and firearms in the car at their respective homes. Sotak did not accompany them. Wagner, known to the officers through previous observations as a reckless driver with little regard for traffic lights and speed limits, was at the wheel. The pair gave the officers a rough time of it until they arrived in Mt. Pocono, Pa., some 127 miles distant from Linden, N. J., about seven o'clock that night. At this point they drove down a narrow street in Mt. Pocono and parked their car in front of an unlighted house for about fifteen minutes, but did not get out of it. From the lay of the land, the pursuing officers were of the opinion that the street was a "dead end." So they continued their surveillance from a distant point. Twice the subjects' car moved short distances or turned around on the street facing the opposite direction. This led the officers to believe that the men knew they were being "tailed," but they were helpless to make the arrests because it was Sunday. The jockeying of the car continued until finally it made a sharp "L" turn and vanished in thin air. The street was not a "dead end," as first supposed, but actually led to an exit half a block away, where there were several avenues of escape. The slowness with which the officers were forced to proceed had allowed the men sufficient time in which to escape. Surveillance was continued at this point for several hours in the hope that they might return—but they didn't. Later investigation proved that Guthrie's mother resided in the house in front of which they had parked; but no one was home, which factor resulted in their change of plans.

By this time the officers were angry enough to chew up the warrants of arrest, but kept plugging away at their job, searching the entire community until long after midnight, but without success. Daylight found them back at the task, but they were recalled early in the afternoon when no further trace was found of the car.

Following a conference, it was decided to abandon the entire operation, which had included the planned arrest of the local residents for whom warrants had been issued, until December 13th. On this date, Pennsylvania was scheduled to have a one-day antlerless deer season, and it was believed the pair would return to try to kill an antlerless deer, even if they were successful in the male deer season. This plan allowed for additional

investigation of other suspects in the Lords Valley section for several additional days.

Four widely different plans were considered for the apprehension of the nonresidents, but each was discarded because of certain unpredictable hazards. Barring the usual mishaps such as an attempt to guess the course the subjects might take on a return trip, which would be about as authentic as an attempt to chart the course a cat might take through a well-stocked fish market, it was decided to repeat the surveillance in New Jersey beginning on the morning of the 12th of December, and to enlist the aid of the Pennsylvania State Police to block the points of entry on the principal highways leading into Pennsylvania. In short, this plan called for the officers to follow the subjects far enough in New Jersey to ascertain which of the three routes they would take in entering Pennsylvania. This accomplished, they were instructed to telephone an alert to the proper sub-station of the State Police, who agreed to make the apprehensions at the point of entry.

Fully equipped to hunt, Wagner and Guthrie, unaccompanied, left Linden, N. J., shortly after seven P. M., on the evening of December 12, 1947, proceeding at the same rapid pace they had set for the officers on the previous occasion. Attempting to follow an automobile driven 75 miles an hour and over strange roads leaves little time to spin a "Yo-Yo." Indications were that they would cross the state line at Portland, Pennsylvania. This information was telephoned to the State Police at Stroudsburg, Pa., but when the officers arrived at Stroudsburg, following through on their mission, and as if they had not already had enough trouble, they discovered that the subjects were not seen to enter at Portland.

Ninety-five cents worth of long distance telephone conversation turned the trick, supplying the necessary spark to a slow-burning fire: the men were staying at a camp near Blakeslee Corners in Monroe County, some fifteen miles from their suspected destination at Mt. Pocono. Cpl. William H. Rowswell and Pvt. D. J. Heinzey of the Pennsylvania State Police proceeded to Blakeslee Corners in a patrol car. Meantime they were joined by the officers who had made the surveillances.

Hotels, inns and restaurants in the town were carefully scrutinized without success. Then the search was broadened to the outlying area. About 2:30 A. M., December 13, 1947, the Wagner automobile was located at

(Continued on Page 27)



Just let the current trend of lawlessness and indifference to true sportsmanship continue in Pennsylvania, and see what happens to hunting in the Keystone State.

We dislike to think of it, and less to mention it, but we might as well look Old Man Gloom right in the face and listen to his words when he tells you, "Boys, you don't appreciate and you refuse to recognize the priceless heritage of sports afield that is yours for a pittance. So in the future you can expect to pay more for shooting one rabbit than you pay now for the privilege and opportunity of shooting the season's limit of all legal game in your State. That's what you are headed for—and only good sportsmanship will prevent it from happening."

Your Federation and your Commission have many problems, but the biggest, most difficult and most important problem facing us is the development of real honest-to-goodness conservation-minded sportsmen; sportsmen who can gain and retain the friendship, respect and good will of the landowners and farmers so they will not post their lands against hunting; sportsmen who will help to provide food, cover and habitat for our wildlife; sportsmen who won't hesitate to report the jack-lighter, the close-season hunter, the game hog and other types of violators to the real friend of the sportsmen and our wildlife—the Game Protector. We need to develop sportsmen who do not live for today alone but who think and plan and work for days and years to come and for future generations. We need sportsmen to teach hunters how to hunt safely so as to prevent accidents. Greed and carelessness are the principal causes for accidents. Greed and carelessness have no place in the life of a true sportsman. So on behalf of the Game Commission. I plead with you to do everything in your power to perpetuate our sport in fields and woods because it leads us to God's great outdoors where everybody, rich and poor, old and young alike, can look to the skies for beauty, inspiration, rest and quiet reverie; because it leads us to God's great outdoors where the whole world is a beautiful cathedral, and the sky, the sacred dome of heaven. Let's preserve this priceless heritage and appreciate this glorious sanctuary which we now enjoy, not just as hunters and anglers, but as true sportsmen. There is hope, not assurance—only hope.

With your indulgence, I'd like to mention some of the things which could bring improvement. Surely the vast majority of you will agree that they are desirable. For example, we should:

A RESPONSIBILITY OF ORGANIZED SPORTSMEN—

from Page 5

1. Reorganize our operations to give better service and results at less cost wherever practicable.
2. Provide a full-time Game Protector in each of the 150 Districts—we now have only 125 Game Protectors for 150 Districts.
3. Increase the compensation of our Game Protectors and others who are underpaid.
4. Provide a reasonably adequate disability and pension system for Game Protectors and other employees.
5. Provide additional Deputy Game Protectors to assist in the enforcement of game laws.
6. Provide in-service training to our Game Protectors and as many Deputies as possible.
7. Provide the Game Protectors with two-way radio communication facilities where feasible, to improve law enforcement and safeguard their lives while performing their work.
8. Provide the Game Protectors with adequate equipment in addition to the two-way radios so they may have the best possible tools to use in apprehending violators.
9. Raise more ringneck pheasants, and release only cocks in the Fall, immediately preceding and dur-

- ing week-ends of the open season. Retain and protect all the hens for release in the Spring with enough cocks to produce maximum natural propagation, and to increase the shootable supply.
10. Strengthen and improve predator control work in every way possible.
11. Develop an extensive food and cover program for our wildlife, in which both the Commission and the Sportsmen will share the responsibilities. By this is meant a long range planting program of cover-producing and wildlife food-producing trees, shrubs and vines, coupled with a net work of small food patches to produce grains, seeds and berries that form natural food for game and wildlife in general. Such a program should ultimately be statewide in scope, but for the present the long range plantings must be restricted to where they will not just serve as browse for deer. Wildlife cannot exist or reproduce without natural habitat which must be produced by a comprehensive food and cover program. It is a must—if we are to be successful.

In our opinion, each and every one of the foregoing items should be put into practice, and many others, as they develop and become apparent from time to time, but to accomplish these objectives would require considerably

(Continued on Page 25)



R. D. Parlamen Photo
Poachers rob true sportsmen of game which might have offered future sport. These illegal deer were found at a checking station conducted by law enforcement officers in northeastern Pennsylvania early last fall.

Cost Comparison

Woven Wire Fence vs. Living Fence
Per 100 Rods

WOVEN WIRE	LIVING FENCE
Materials: ¹ Woven wire, 26" @ \$0.60 per rod ...\$60.00 Barbed wire, 2 strands @ \$5.50 per 80 rod spool 13.75 Posts, line 1 per rod @ \$0.40 each 40.00 corner and brace, 2 sets @ \$3.00 per set 6.00 Labor: Fence construction 70 man-hours (0.7 man hrs. per rod) @ \$0.50 per man-hour 35.00 Land: 0.15 acre @ \$100 per acre (4' wide x 100 rods long=0.15 acre) 15.00 TOTAL COST ³ \$169.75 ANNUAL MAINTENANCE AND REPLACEMENT COST: (6% of cost of labor and materials—\$ 9.88)	Materials: ² Plants, Multiflora Rose, 1650 (1 foot apart in single row) @ \$29.00 per M .....\$47.85 Labor: Site preparation Plowing, 2 man-hours @ \$0.50 per man-hour 1.00 Discing, 1.5 man-hours @ \$0.50 per man-hour 75 Planting, 33 man-hours (1650 plants @ 50 per hr. @ \$0.50 per man-hour 16.50 Cultivating, 4.5 man-hours (three cultivations) @ \$0.50 per man-hour 2.25 Land: 0.375 acres @ \$100 per acre (10' wide x 100 rods long=0.375 acre) 37.50 TOTAL COST .....\$105.85 ANNUAL MAINTENANCE AND REPLACEMENT COST: Negligible

¹ At 1947 prices.
² Commercial nursery price for good quality stock, spring 1947. If plants cost less than \$29.00 per thousand, reduce total cost by the difference. If plants can be obtained from government sources (at \$6 per M) and if the farmer does the work himself and does not mark off land value, he can put in a mile of Multiflora Rose fence for as little as \$100. The cost of an equivalent wire fence will run \$500 to \$700.
³ A 3-strand barbed wire fence would cost \$111.62 with annual maintenance and replacement costs of \$5.80.

LIVING FENCE—
from Page 7

heavy roller along each side of the planted strip within two or three inches of the seedlings. One man on a tractor and one man helping can plant 500 plants per hour by this method. If a tobacco or tomato planter is used, the site would have to be plowed and harrowed and then two men riding the transplanter and one on the tractor could plant from five to ten thousand plants per hour. After setting, the tops are pruned back to about two inches above ground.

Hay, straw, cane choppings, or sawdust may be used as mulch. Weeds should be kept down to allow the young plants to get a good start. Mulch should be renewed each year for the first two or three years or the fence row can be cultivated when necessary from early spring to midsummer.

With satisfactory growing conditions, two or three years of such cultivation will be sufficient, and lespedeza and grass may then be sown or allowed to grow on the strip. After the plants reach maturity and the growth gains density it will be an effective weed control (in itself). This is one of its virtues. The chore of keeping down weeds along the fence row will be taken over and the farmer can go to the ball game.

If livestock is roaming about, the new planting should be protected by a temporary fence. Missouri farmers are using an electric fence for this purpose. Gaps or blanks where plants have not taken hold must be filled in the following season to insure a fully-closed fence.

It is best to set posts for gates and gaps at planting time to save working among the thorny branches later.

Where to Buy Plants

Plants are available through commercial nurseries, through the U. S. Soil Conservation Service and through the various state game and fish department nurseries. The Soil Conservation Service distributes some plants without cost. Most of the state conservation departments charge a nominal fee for the plants. The commercial nurseries naturally object to being underpriced by the government nurseries and point out that a large scale demand for plants can only be supplied by themselves, although many of them report they may not be able to supply current demands this year. Among the reliable commercial nurseries selling plants are: C. L. Vanderbrook & Son, Manchester, Connecticut; Farm Landscape Company, Box 230, Urbana, Illinois; Forrest Keeling Nursery, Elsbury, Missouri; C. R. Burr, Manchester, Connecticut; Brownell Roses, Little Compton, Rhode Island; Arthur Dummett, 63 Anderson Road, Bernardsville, New Jersey; Brown Brothers Company, Brighton Station, Rochester 10, New York; Boulevard Nurseries, Newport, Rhode Island; Brookville Nurseries, Glen Head, New York; Fairview Evergreen Nurseries, Fairview, Pennsylvania; Musser Forests, Inc., Indiana, Pennsylvania; Springhill Nurseries, Tipp City, Ohio.

(Continued on Page 26)



Farm Quarterly Photo by Hesselschwerdt
Three Multiflora bushes planted 15 inches apart grew into this stock-tight barrier.

GROUSE TRIALS—

from Page 8

birds and even though many felt that he should have been called back for a crack at the two-hour grind, he was passed up by the judges as were all the other dogs, thereby not declaring a champion for 1948.

Nevertheless, this medium sized, sprightly built, even tempered grouse specialist pulled down the curtain on season '48 by decisively defeating all of the best grouse dogs in the country. There was no question about his win, for not only was it decisive but sensational too!!! When we saw Skyhigh bag the \$1,000 feature state last fall we predicted a brilliant future for the Sam Light color bearer.

On this day, to triumph over the most colorful grouse performers in the country, Skyhigh had to run a slashing and brilliant race by beating back several other stars who were right on his heels. Jimmie, as Skyhigh is known to his friends, hunted with an uncanny sense of direction searching for bird scent with his sensitive nostrils and blood-filled, deep brown eyes. Nineteen other grouse greats, and near greats were right in there knocking, but the sturdy little setter beat them all back without batting an eyelash.

This day belonged to Skyhigh and he made the most of his opportunities. Down on course four, really ideal Allegany Plateau grouse territory, Jimmie delivered a strong race. He ran as wide as did the cover permit, and this meant that at times the setter was out from four to five hundred feet still handling kindly for his proud handler, until his unerring nose finally directed him to a covey of feeding grouse. The birds were found along a winding brook whose banks were stunted with frosted and dwarfed hemlock. We saw a brilliant setter cutting out in front, way out in front. His head was held high, his sensitive nostrils tested the light breezes and his animated tail denoted extreme pleasure in his work. Crossing to the left Jimmie neatly shifts his course, changes directions, like an all-American halfback he changes directions, and dashes—dashes mind you, not pussyfoots or creeps, straight into the wind to slam into point!



Another Sam Light setter, Hadaway, literally ran the rest of the field into the ground to cop the National Derby Classic.

BOOK REVIEWS



SMALL GAME & VARMINT RIFLES—

Henry W. Stebbins, A. S. Barnes & Company, 67 W. 44th Street, New York 18. Price \$3.75.

Contains up-to-date impartial information on current arms and ammunition. There are also invaluable chapters on such subjects as foreign rifles, reloading, range work, stalking, sights. Everything that the shooter will want to know.

* * *

WINGS IN THE WILDERNESS—Allan D.

Cruickshank. Oxford University Press, 114 Fifth Avenue, New York 11. Price \$6.00.

This is a book for every student of bird-life, every camera enthusiast. Out of his collection of more than 30,000 negatives, this famous wildlife photographer has selected 125 of his favorite pictures for inclusion in this book. All details as to camera, lens, stop and speed used are also given.

All eyes are on the dog and Tuttle walks leisurely toward him. Not hurriedly, he has confidence in the charge. However, as we approach a grouse is heard taking wing about fifty feet ahead from beneath a hemlock, and Jimmie denotes the departure by a slight wiggle of his tail. Tuttle gives him the whistle and now we witness, an almost lost art among grouse dogs, the most sensational bit of class relocation and roading that we have ever seen. Straight into the open Jimmie dashes, as fast as he can go, tail high, merry, and head reaching out. Back and forth he weaves, finally darting straight as an arrow to the stream's bank. He again has his birds, perfect, head high, tail high and sure of his work. Another time Tuttle approaches the pointing dog. We follow behind to see drops of drool dripping from sides of the dog's mouth and a mist floating from his nostrils. Proudly the fellow drinks in the scent and chomps his jaws in pleasure. He is intense, and except for a slight quiver of his front shoulders the dog might have been carved from mountain stone. While he waits patiently for Tuttle a strange fire smolders in his brown eyes. Both handler and dog realize this to be a special occasion. Walking ahead of his dog Tuttle flushes five more grouse from various directions. Like a statue Jimmie never even winks at the shot. From here on in he is an inspired dog and runs the remainder of his heat in

THE GREAT FOREST—Richard G. Lillard.

Alfred A. Knopf, Publisher, New York. Price \$5.00.

The story Mr. Lillard tells is rich and rewarding in detail and grasps both the practical meaning and poetic content of conservation from its beginning. The story of what happened to the forest, how it was used and abused, and finally destroyed in the swift conquest of the land, reaches into every part of our national history and illuminates nearly every aspect of our daily life.

* * *

OUR FLOWERING WORLD—Rutherford

Platt. Dodd, Mead & Company, 432 Fourth Avenue, New York 16. Price \$6.00.

Here is a splendid account of the development of plants from the first one-celled and simple organisms to the most complicated and beautiful flowering plants of the modern world. It is not, as the title might imply, a book merely for the flower lover alone.

championship form. On this day the great little setter could not be denied.

In second place, we find another white and black, strongly built setter bitch, Hall's Whitey, owned by Mrs. A. A. Hall, Piqua, Ohio and handled by Gene Galloway from nearby Marienville, Pennsylvania. Whitey's race was a bit strong. Perhaps we should say she was a trifle difficult to handle for best comfort. But her's is stamina to burn. She never tires and always searches her birdy objectives with uncanny judgment. While Whitey had a brilliant find on two grouse near the turning point on the course she relaxed somewhat as Galloway came into flush detracting slightly from her otherwise brilliant find. This grand setter bitch also had another point but it proved unproductive as Galloway tried in vain to flush without success.

In third place we come upon Boss Knight, another burly, finely conditioned setter owned by Ralph Hertz, Warren, Pennsylvania and handled by Luther Smith, White Cloud, Michigan. While Boss's race was not brilliant in any sense of the word his handling of game and his perfect manners on grouse could not be censured. With style to spare he is a sight for sore eyes as he cuts the rough cover, but he lacks good judgment and leaves a multitude of birdy spots unexplored. His find on two feeding

(Continued on Page 25)

MODERN MUZZLE LOADER MATCHES—from Page 13

guy who starts his ball with a wicked belt from a carpenter's hatchet. Strangers invariably expect to see the rifle rebound at least a foot off the ground.

The most distinctive feature of a muzzle loader match is the easy-going atmosphere; yet this lack of action and excitement contributes greatly to its enjoyment by both shooters and spectators. Loading is necessarily a slow process, giving the contestants plenty of time to exchange small talk. These discussions on new pieces of equipment, rifle-making tricks, forthcoming shoots, and all sorts of technical dope are of intense interest to everyone, and it's a rare day indeed, when even the most experienced black powder fan doesn't learn something at a shoot.

Due to the complexity of loading and the distracting conversation, shooters sometimes pull boners that prove extremely embarrassing, and there's no end of fun at the expense of forgetful contestants. For example, imagine the embarrassment of one of our leading flintlock shooters when, on firing his big match rifle, he perceived his ramrod hurtling across the range like a javelin. It seems he had forgotten to remove it after loading his rifle. Then there's the disconcerting and all too common predicament of having absent-mindedly rammed a ball home before charging the rifle with powder. Unless his rifle has some special provision for remedying this dilemma the shooter is faced with the choice of either tearing down his rifle, removing the breech-plug, pouring in a quantity of powder, re-assembling the gun and firing, or spending considerable time trying to poke sufficient powder through the touch-hole to drive out the ball. This latter method is similar to trying to put tooth paste back in the tube. (Never mind *how*—I know!)

Particular attention should be paid to the rifles. They run the gamut of types from 18th Century flintlocks to huge percussions built by today's most zealous gun-tinkers, and weigh up to fifty pounds. As match shooters realize the advantage of using a ball of wind-bucking proportions, even a .60 caliber bore doesn't attract a bit of attention.

Most of these newly built rifles are similar to the match rifles of flintlock and percussion days. Heavy of barrel and large of bore they are full stocked in beautiful fiddle-

back maple with muzzle rests for bench shooting. Like their forebears they have no patch boxes and very little ornamentation. The locks are usually old originals, and sometimes old barrels or pieces of furniture are utilized, but as a rule they are almost entirely a Twentieth Century product. A surprisingly high percentage of these arms are flintlocks, and in spite of the obvious advantages of the percussion system some of the highest scores and tightest groups are turned in by flintlock shooters. Telescopic sights are not allowed in these matches but many guns are equipped with the finest adjustable aperture rear sights and target front sights.

There's no better way to really get into the spirit of things than to follow a certain shooter through a match and see how it's done. This tall fellow over here with the flintlock seems ready to start so let's tag along with him.

First of all, he pays his entry fee in the club house and is given two targets; one for his five practice shots and one for five record shots. While these are being hung he props his rifle against the edge of the loading bench and proceeds to load it in an upright position. A few shooters assume the old position of holding the barrel under one arm with the butt resting on the ground, but the extreme weight of these pieces makes this a very tiring procedure.

Our shooter has loaded his flintlock, but as a safety measure does not prime it until it is placed on the shooting bench. The flags out on the range are waving lazily and the shooter waits patiently in shooting position until their stillness indicates a dead calm. Then the trigger is touched and the flintlock responds with a "swish-BOOM."

A heavy cloud of smoke rolls from the muzzle, temporarily obscuring the target, while another almost as dense rises from the pan. A friend, watching through a spotting scope announces, "In the ten-ring, at four o'clock." Although this is an unusually satisfactory first shot, practice firing continues until all five shots are made, then the contestant swings to the record target. Every precaution is taken to see that the rifle is identically loaded each time. The bore is painstakingly cleaned following each shot, and the wind is carefully checked before each try.

In spite of our contestant's meticulous loading and shooting, however, he is forced into third place by a "flyer" caused by a sudden, unexpected puff of cross-wind, ruining an otherwise splendid group. The leading shooters finished with a 49-1X and a 49 respectively. That's packing them in!

Shooting for score is only one type of match. The re-entry matches for the smallest five-shot groups invite keen competition, as the contestants are allowed to buy as many targets as they wish. Groups measuring $\frac{1}{2}$ inch have been recorded in the fifty yard match, while groups are not at all uncommon in which every shot cuts the same hole.

Besides these matches one can also enter off-hand matches with NRA, squirrel or groundhog targets. These are tests of per-



"You may have noticed, it kicks a trifle!"

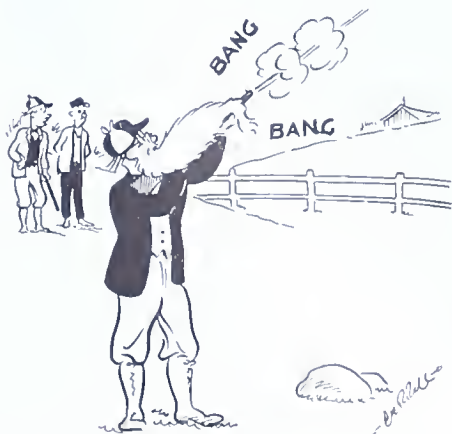
fect holding and most of the guns entered are the lighter hunting type.

The annual State Championship matches are held here at Shartlesville in June. To retain the trophy one must be a three-year winner, and the championship goes to that shooter who scores highest in an aggregate of three five-shot matches, one at fifty yards and two at one hundred yards. The club's oldest shooter, Frank Mogel of Leesport was the first State champion. Others who at one time or another held the title were Calvin Miller of Strausstown, present holder of the trophy, Phares Brenner of Millersville, Walter Wengert of Shartlesville, William Younker of Shartlesville and Jerome E. Hirtle, Jr. of Bath; the last two having been two-time winners. Last year the title was won by Clarence Bender of McConnellsburg. A look at the targets turned in from this contest usually satisfies the most skeptical that these out-of-date guns can still deliver the goods.

Female contestants are encouraged by the women's matches and husband and wife matches. Prominent entrants in the latter are Mr. and Mrs. J. E. Hirtle, Jr., both consistent winners at shoots throughout the country and the latter Eastern States Women's Flintlock Champ, Mr. and Mrs. Sylvester Schaeffer of Bernville, Mr. and Mrs. Charles Wengert of Bernville, Mr. and Mrs. Donald Coble of Bellfonte, the former a recognized authority on muzzle loaders, Mr. and Mrs. Russel G. Erwin and Mr. and Mrs. Ernest Ketner of Strausstown.

The splendid shooting done by Pennsylvania marksmen was proven by their success in the big 1947 shoot at Fort Ticonderago, N. Y. Contestants from the Blue Mountain club alone walked off with the following honors; J. E. Hirtle, Jr., Fort Ticonderoga trophy for 50 yard match and first place in the 35 yard novelty off-hand match; Mrs. Hirtle, first place in 50 yard flintlock event; Lee Heister, first in the Caplock 50 yard match; Sylvester Schaeffer third place in the same event.

The country's outstanding shoot is the National Muzzle Loading Rifle Championship Shoot held at the Walter Cline Range, Friendship, Indiana. The 1948 shoot consisted of thirty-eight rifle matches and eight pistol matches and covered a period of five days. One cannot help wondering what our buckskin clad forefathers would think of a shooting match of such proportions, and of the folks who would travel hundreds, yes even thousands of miles to see and participate in a contest using flintlock and percussion rifles.



"I'm afraid we'll have to get higher sights for grandpa's gun!"

A RESPONSIBILITY—from Page 21

more funds than would become available from a \$3.65 license fee. We could finance all of some of them and some of all of them, but with a \$3.65 license fee we could not finance all of these improvements.

The campaign for needed additional funds is not for the benefit of the Game Commission, which for years beyond reason has fought a valiant fight for the benefit of the hunters. If the hunters are not interested in themselves, their welfare, their recreation, their future sport, and if they cannot realize that neglect and indifference mean ultimate disaster, it lends little encouragement to us who try so conscientiously to serve them well and to please them. However, it is not encouragement for us that we want. We want to produce encouraging results for the hunters themselves. It's not a case of paying only dividends—but of returning the entire principal with interest—yet so many expect so much more than even that!

Sports afield has reached the "put and take" basis, whether we like to acknowledge that fact or not. From now on we must "put" more to "take" even as much, or more.

The salvation of your sport of hunting rests more solidly on the shoulders of the Pennsylvania Federation of Sportsmen's Clubs, and its affiliates, right now than ever before. You are carrying the flag—that flag with the two stars we talked about last October!

You are waging the battle! Without YOU, there could be no victory and without the organized sportsmen, there is little chance for the continuance of the American way of hunting.

You have a serious responsibility.

It's entirely upon your shoulders, but your Game Commission will go forward with you, and help in every way possible.

The future of hunting in Pennsylvania is in the balance.

There is little question about what should be done. It's only a question of how much. The most that will be done will be too little compared with the needs.

Shall we go forward and meet the challenge or sit idly and indifferently by and see public hunting become only a memory and a token of our indifference? The answer is up to you!

For myself, I pray to God that future generations may not be denied the wonderful pleasures and enjoyment, the recreation and benefits that have been mine from hunting.

For my part, as a sportsman, I shall give far more of my money and effort toward that objective than is my share.

Who else cares?

Who else is willing to meet the challenge?

In all sincerity, organized sportsmen it's up to you!

We have a real job ahead of us—so let's get going!

GROUSE TRIALS—

from Page 23

grouse came at the three quarter mark when he remained perfect to shot, despite interference by the chase and by his brace-mate who swished by Boss to flush the birds.

National Derby Classic

Twenty setters and one pointer vied for top money in the fast growing National Grouse Derby Classics. And another Sam Light setter, Hadaway, a very small, sprightly and heavily ticked fellow literally ran the rest of the field into the ground to decisively cop this stake. Once more, it was Larry Tuttle who piloted a classy youngster to victory. However, Hadaway's win did not come easily. Both in his initial half-hour and again in the final hour before he was crowned winner he had to beat back the determined efforts of one large, handsome, Michigan setter, Retinoscope. Handled by Luther Smith, Retinoscope, better still Tim, is owned by Dr. Paul Cosgrove, Michigan. Both dogs were equal with little to choose from in their first half-hour. Ben, as Sam Light's Hadaway is called, came through with a sparkling find that necessitated a nice relocation on a running and feeding grouse, while Tim had chalked up two perfect finds on three grouse in his initial half-hour. It was in the final hour that the diminutive, thirty-five pound Ben showed his superiority. While Tim faltered at the thirty-five minute mark, Ben kept pouring out the steam and sustained his gruelling pace right up to the final minute of the hour. At the forty-minute mark, night began to fall fast, when Ben had a dandy find on four feeding grouse. This climaxed one of the highest type Derby Classics ever witnessed in the grouse woods. At the close of the hour Tim was a tired dog while Ben was relatively fresh. His win was outstanding.

Open Puppy

Smokey Joe, the rugged setter dog who is just now coming into his own, won the puppy stake. Owned by Mrs. A. A. Hall, Piqua, Ohio, Smokey Joe is handled by Gene Galloway, Marienville, Pennsylvania. Second winner was Skybeck Mustange, setter dog owned by Bob McCarter, handled by Art Hought. Third honors were taken by Puckety Rosabelle, setter bitch, Ed McKean's dog handled by Carl Beattie.

Amateur All Age Stake

Copping first honors in this stake is the fast-stepping and stylish setter, Puckety Dingbat, owned and handled by Edgar McKean. Ding barely missed in the Open All Age when he accidentally flushed his bird in an attempt to relocate. However, on this occasion his birdwork was perfect to a letter and his win outstanding. Second honors were Fiora Sky's, who is a setter bitch owned by Sam Light and who was handled by Dr. A. W. Anderson in the absence of Sam Light. The dog's ground heat was too big but her find on two birds left little to be desired. Third honors went to the only pointer to place in this event, Puckety Bang, owned and handled by Edgar McKean. Since there were no birds on this course, Bang was placed, not on birdwork, but on his ability to search out the country.



Robert S. Phillipe presenting a conservation plaque to Frank Harl, president, and G. H. Ellenberger, secretary, of the Punxsutawney Sportsmen's Club, for use on the recently developed club grounds less than a mile from the center of Punxsutawney.

LIVING FENCE—

from Page 22

Diseases and Range

Multiflora Rose, like all roses, is subject to numerous diseases and pests, such as leaf spot, mildew and rusts, scale insects, leaf miners, and others. No serious insect pests have been observed to attack Multiflora Rose, but various diseases, and common leaf eaters, such as grasshoppers, cause some defoliation by late summer.

Multiflora Rose is adapted to a wide variety of soils and situations, but will probably not form a barrier on badly eroded claypans or droughty sands and gravels. Fertilization is of little advantage.

The plant is generally considered hardy to the northern boundary of Missouri, the central parts of Illinois and Indiana, and throughout Ohio, but there are numerous colder plants much farther north. Even at Brookings, South Dakota, the species persists and makes vigorous growth, although many branches kill back.

The two objections to the Multiflora Rose most often heard are that it will not turn hogs effectively and that it does not become a stock-tight barrier until it is two or three years old. The answer to the first will probably be solved by closer planting. The only remedy for the time element is to look ahead and start your fence two or three years before you need it—or develop the virtue of patience.

A minor objection is that you can't cut across fields to visit your neighbor if you have Rose fences. On the other hand, if you're feudin' with him, a Rose fence is a blessing and a comfort.

NOTICE

The Pennsylvania Game Commission does not maintain its own plant nursery and therefore cannot supply any multiflora rose stock. It is suggested that you contact either the Pennsylvania Department of Forests & Waters, Harrisburg, or any reputable commercial nursery in the State if you desire to make purchases of seedlings.

NORTHWEST SPORTSMEN

By SETH L. MYERS

A few days after the close of the past small game season in Pennsylvania, I found myself in the midst of a group of Erie County sportsmen. I inquired about small game conditions in their county. I was surprised at their satisfied answers. They were actually pleased.

There was no boasting. Not even a flowery explanation excepting that their county sportsman league had stocked a lot of rabbits. They also mentioned that ringnecks had been stocked by the league. They appeared to be confident that their local effort was paying off.

The next I learned about the Erie County small game conditions was at a Northwest Division meeting in Meadville, December 19th. When the Chairman of the convention called for reports of counties, the Erie County delegate announced their top activities for game as follows:

"An extensive campaign was waged against predators; a great many ringnecks were released in good food and cover sections, and our county sportsmen purchased around two thousand rabbits for stocking." He added that this annual program along with the stocking done by the game commission was proving very pleasing to their local sportsmen.

When Delegate Carlyle Brock mentioned the purchase of that many cottontails, other delegates became busy with pencils and paper. The cost of Missouri rabbits averages around \$1.25 each.

Now comes to my desk, the January issue of the *Erie County Sportsman*, a swell little magazine published by and for sportsmen members. In it we read a report of 2100 cottontails purchased and stocked by the sportsmen of the county, the end of the year.

That is really putting money into their hunting sport. It seems they have decided that to maintain good hunting sport, the sportsmen must pay more, as do all others who go for other kinds of recreation.

From the happy experience of the Erie County sportsmen, it appears that if other counties desire better hunting, this is one way it may be attained. Sportsmen of today, need to forget the old idea that game is a free gift of nature. That gift has been wasted. It's gone.

If, and when, sportsmen can agree that to bring back even fair hunting, they must dig much deeper into their pockets, it can be had. But there must be several "ifs" worked out before they can expect the game supply they desire. They must wage predator campaigns. They must create good food and cover conditions for the game that is stocked.

Instead of spending so much time trying to place the blame for the decreasing game supply, sportsmen must unite in more effort to increase and maintain a satisfactory supply.

TRAINING THE GUN DOG PUPPY—from Page 16

run and play, but call him back and repeat the command. It will do no harm to give him a gentle flick with the switch to keep him in place. Repeat the procedure until he understands and you will achieve the proper results in a short time. Make each walk very short, never allowing the little feller to become tired.

The young dog may be started in retrieving while still a pup, provided the tactics used are administered with great care and patience. Many youngsters show a natural willingness to retrieve, and with these tendencies cultivation of the trait is sufficient. Use a rubber ball or a small dumbbell cut from soft wood, throw it out for him and allow him to return it to you. Use simple commands and *always* use the same words. When the object is thrown, call "seek dead," and when he picks it up, command "fetch." When he delivers it to you, reward him with an affectionate pat, clearly showing your approval. When this groundwork is laid, the transition is but slight from the rubber ball to a dead bird in the field. Do not tire the dog and avoid play, and if the prospect shows no tendency at all to retrieve after work-

ing with him along these lines, wait a few months and use the force method.

Take the puppy into the field at every opportunity, and allow him to do as he pleases and learn things in a natural inquisitive way. Encourage him to hunt by walking away from roads and paths, where field larks, brush birds and insects will attract his attention. Use different territory, giving him the opportunity to explore new sections and see new sights. Take him in rough cover at times, as this will help him to become tough and prevent his seeking easy footing.

If the pup should be slow getting out into cover on his own, take along an older dog that the prospect may follow. Here again do not allow him to become too tired. Take him up immediately at the first sign of fatigue, and do not let him run out on the way back. Keep him on a leash or at heel.

If these simple instructions are followed, your puppy will be started in the right direction, and training a bird pup can be a great source of pride and joy.

THOUGHTS ON LEAD—from Page 16

In the first place, you get very few shots in which a bird crosses the line of fire at exactly right angles. Then the range never is exactly the same twice, and different birds, even those of the same species, fly at different speeds. A lot depends on how badly they're scared.

There is only one shot that you can tell another hunter how to hit, and that is an absolute straight-away. Of course, everybody knows how to hit it. The unfortunate fact, however, is that you only get one straight-away for every 500 shots at other angles. We often hear someone say, "I can take the tough ones, but I seem to miss the easy straight-aways every time."

What these hunters don't realize is that they weren't missing birds flying straight away. The birds they missed probably were climbing slightly. They didn't allow for it and shot low. Some species have the trick of flaring quickly and then straightening out at a slight decline. Unless you hold under a bird that does this you'll miss him every time.

In addition to the up and down angles, most apparent straight-away birds veer slightly to right or left. You have to allow for that, too.

This is only the start. There is an infinite number of angles at which a bird may fly in relation to both the horizontal and vertical planes, always from a different position in relation to the gun and always at different range. These countless possibilities are what make wing shooting the most fascinating of all sports.

The most important factor in favor of the hunter is the fact that his shot travels through the air, not like a disc as we are inclined to think from looking at paper patterns, but in the shape of a cylinder. To visualize how this works, take a pencil in your left hand and the cap off your pen in the right.

Now, imagine that the point of the pencil is a bird in flight, move it slowly across in front of you. Try to intercept it with the pen cap, representing the charge of shot, in the other hand.

You may hit the point with the end of the cap. This is what you would have to do if your shot didn't trail out. More than likely, however, the point of the pencil will hit the side of the pen cap. This is exactly what usually happens when you kill a bird at any angle other than straight away. Part of the shot

passes ahead of him, part goes behind, and he flies into the charge somewhere along its length.

This stringing of the shot, far from being undesirable, is the greatest aid the shooter has because it compensates for errors in lead, and, as shown before, some lead is necessary on virtually every shot. Our illustration also shows why it always is safer to lead a little too much rather than not enough. If you don't lead far enough, the entire shot charge will pass behind the bird. If your lead is a little long, he'll fly into it.

I think that this trailing of the shot, which I never have seen discussed in print before, is of far more value to the shooter than its lateral dispersion. If the killing pattern is 30 inches in diameter, then holding off 18 inches to either side would cause a miss. Eighteen inches isn't very much at 40 yards. If the lead had to be that accurate we certainly would miss far more often than we do.

Now that we see our lead doesn't have to be absolutely accurate, here are some pointers that may help the man who has been having more than his share of trouble. (Everybody has some trouble.)

First, swing with every bird and keep on swinging after you pull the trigger. Of course, in upland shooting, particularly on grouse and woodcock, there are many times when you can't swing. You have to snap your gun ahead and shoot. But don't carry this habit into the duck blind or use it on open shots at upland birds.

Second, remember that lead is necessary on virtually every shot. On narrow angles, where a bird rises a few yards to right or left of the gun and flies almost straight away, the lead required may be only a few inches, possibly one bird length, but it still is necessary.

Third, never forget that a little too much lead always is safer than not enough. Some time when you're missing ducks, try leading them farther and farther and see what happens. It seems to be almost impossible to overlead a fast flying duck at 35 yards or more. Of course, such a long lead hardly ever is used in upland shooting—except, possibly, at a passing grouse or pheasant—but some lead is required on every angle shot.

Fourth, find out where your gun shoots. This may seem silly when shotguns are under consideration, but it isn't. Sight your gun like a rifle and shoot it at a mark 30 feet away. Most doubles shoot where they look, but not all single barrel guns do, and those which have had some variable choke device attached are especially likely to be off.

P. S. (THEY GOT CAUGHT)—

from Page 20

the farmhouse of Mrs. George Henning at Fern Ridge, Tunkhannock Township, Monroe County, Pa. Wagner and Guthrie were sleeping peacefully, probably dreaming of killing a deer. But before they could catch the finish, Cpl. Rowsell placed both men under arrest. Five o'clock found the defendants vigorously protesting their innocence, as the sheriff of Pike County closed the heavy iron doors on their cells, temporarily restricting at least one of their four freedoms.

With two of the three nonresident defendants in safe-keeping, full attention was directed in the early afternoon to rounding up the remainder of those in the "wanted column." Warrants were distributed to officers working in pairs with instructions to "bring 'em in." By seven thirty that evening the county seat at Milford became suddenly aware that the Game Commission had really "cracked down" on the game law violators. Bondsmen were doing a land office business—or couldn't be located—while their friends fretted and paced their cells in jail. The office of Mary C. Lohmann, Justice of the Peace, was the busiest place in town. Several of the defendants nervously waited their turn to

"pay up" and lost no time in getting out of town.

Wagner and Guthrie when interviewed, again categorically denied their guilt and demanded hearings. Each being unable to furnish \$500.00 bail was taken back to jail to await formal arraignment the following Monday morning. However, after consulting an attorney late that night, they pleaded guilty to five charges and paid cash fines totalling \$340.00, and costs of prosecution amounting to \$28.00, and were released. Several of the defendants were convicted before the Justice and paid their fines and costs; others were acquitted. Four of them took appeals to the Courts of Quarter Sessions, where most of the convictions were sustained.

At season's end, this operation had resulted in the arrest of sixteen persons on a

wide variety of charges embracing: possessing parts of deer in close season; buying and selling deer and bear, or parts thereof; hunting without a license; loaning licenses; hunting during license revocation period; false statements to secure license for two years; attempting to kill deer in close season with an artificial light; and assisting to take deer in close season in the same manner.

Ten persons were convicted, two gained acquittals, and one escaped by joining the army a month before "Judgment Day." Penalties totalling \$1,180.00 were collected, to which should be added the sum of \$154.20 in costs of prosecution. Attorney's fees amounted to several hundred dollars—and all this was in addition to the inconvenience of attending trials and the cost of summoning defense witnesses. License revocations for the convicted group aggregated sixteen years; one drew an indefinite suspension.

What happened to Michael Sotak? Nothing! Subsequent investigation revealed that John Sotak (Michael's brother) had hunted in Pennsylvania in 1946, and had purchased a resident license in his brother's name without his knowledge. This little oversight was adjusted—upon the payment of fines and costs which set John back \$76.50.

Yes, there is an old adage that game law violators do the damndest things!

LOST

An L. C. Smith 20-gauge, double barrel, single trigger, ejector model, custom built shotgun. This shotgun was lost on the last day of the 1948 small game season at a point approximately six miles north of Marienville, Pa. Any information about the gun should be forwarded to the editor of the "Game News". A reward is offered.

GAME LAW VIOLATIONS

(All persons listed by county of residence; regardless of the county in which violation occurred)

Cases Settled During the Month of December, 1948

LEBANON—\$590.00

Donough, Harold G., R. D. 1, Lebanon. Attempting to kill two deer in one season; failure to tag trap	110.00
Gerart, Ray H., R. D. 2, Annville. Shooting at random in big game season	10.00
Heckard, William E., 28 Hoffman St., Lebanon. Failure to tag 5 traps	50.00
Hinkle, Edgar J., R. D. 1, Annville. Failure to tag trap	10.00
Keener, Louis M., Schaefferstown. Possessing deer unlawfully taken; using motor vehicle to transport a deer illegally killed	150.00
Miller, Marlin L., 11th and Maple Sts., Lebanon. Failure to show hunter's license on demand of officer	20.00
Netzey, Walter S., R. D. 2, Myerstown. Possessing male deer not having 2 points to one antler	100.00
Schenk, Clark B., Newmanstown. Assisting to conceal deer unlawfully killed	100.00
Young, Paul R., Jonestown. Shooting at random during big game season	10.00
Zimmerman, Eli W., R. D. 1, Richland. Failure to tag 3 traps	30.00

LEHIGH—\$660.00

Cressman, Kenneth V., Limeport. Attempting to kill two deer in same season	100.00
Fisher, Ira H., 412 W. 9th St., Bethlehem. Shooting at random during big game season	10.00
Fogelman, George E., 670 Franklin Ave., Palmerton. Shooting at unprotected target in big game season	10.00
Green, Arthur L., R. D. 2, Slatington. Possessing loaded rifle in vehicle in motion on highway	25.00
Hartman, Robert S., R. D. 1, Allentown. Failure to tag trap	10.00
Hoffner, Claude E., Slatedale. Killing spike buck deer	100.00
Kuehner, Allan D., 116 Chestnut St., Slatington. Failure to stop motor vehicle upon signal of officer	10.00
Merkel, Charles B., 226 Sixth St., Fullerton. Hunting with license of another	20.00
Miller, Raymond I., R. D. 4, Allentown. Attempting to kill two deer in one season	100.00
Peters, Henry T., Emerald. Killing doe deer in closed season	100.00
Roman, George L., 168 Reliance St., Egypt. Failure to display license tag while trapping	20.00
Saylor, Robley E., R. D. 4, Allentown. Attempting to kill two deer in one season	100.00
Seng, Fred L., 345 N. 9th St., Allentown. Possessing loaded rifle in vehicle in motion on highway	25.00
Stein, Charles C., R. D. 1, Slatington. Failure to tag trap	10.00
Worman, Edwin F., Jr., R. D. 1, Allentown. Failure to stop motor vehicle upon signal of officer	10.00
Zellner, Lester C., R. D. 1, Allentown. Failure to tag trap	10.00

LUZERNE—\$635.00

Baer, Eugene W., Jr., Conygham. Hunting within 150 yards of occupied building	25.00
Bruni, Daniel, 117 Alden Rd., Nanticoke. Killing hen pheasant in closed season	25.00
De Marko, Samuel, 15 Ensign St., W. Wyoming. Transporting parts of untagged deer	25.00
Enos, Andrew T., 914 Center St., Freeland. Transporting part of untagged deer	25.00
Fuax, Arthur J., R. D. 1, Pittston. Failure to stop vehicle upon signal of officer	10.00
Grow, David V., 32 Church St., Pittston. Hunting without resident license	20.00
Granda, Stanley F., 199 Hazel St., Wilkes-Barre. Shooting at unprotected target in big game season	10.00
Kalish, Joseph V., 64 Cooper St., Pringle. Possessing loaded rifle in vehicle standing along highway; hunting without resident license	30.00
Latisky, Edward P., 559 Washington St., Freeland. Hunting on license of another	20.00
Medash, Thomas J., 95 Main St., Eckley. Transporting parts of untagged deer	25.00
Orbinski, Walter, 763 Grant St., Hazelton. Possessing deer unlawfully taken	100.00
Pisanesci, Albert A., 370 Tripp St., W. Wyoming. Lending hunting license to another	20.00
Reynolds, Marvin F., 240 Boland Ave., Wilkes-Barre. Hunting in Safety Zone	25.00
Sawer, Walter S., 408 S. Sherman St., Wilkes-Barre. Shooting at unprotected target in big game season	10.00
Suchocki, Edward J., 1384 Washington St., Wilkes-Barre. Hunting wild ducks with shotgun containing more than 3 shells	10.00
Szafran, Steven, R. D. 1, Alderson. Making false statement in attempt to collect bounty	10.00
Truchon, Michael, R. D. 1, Shickshinny. Killing doe deer in closed season	100.00
Tubridy, Thomas J., 98 N. Franklin St., Wilkes-Barre. Using bullet not of expanding type to kill deer; possessing loaded rifle in vehicle standing along highway	110.00
Vaessen, Carl P., 243 Poplar St., Wilkes-Barre. Shooting within 150 yards of occupied building	25.00
Yacalavitch, John J., 186 Mason St., Exeter. Failure to visit trap within 36 hours	10.00
Pitzer, Theodore R., Dixon, Illinois. Assisting to conceal deer unlawfully killed	100.00
Platt, Eugene, Elizabeth, N. J. Transporting parts of big game unmarked	25.00
Poremsky, Paul J., Washington, D. C. Possessing loaded rifle in vehicle standing along highway	10.00

Rakshys, Albert, Hempstead, L. I., N. Y. Making false statement to secure hunting license	20.00
Reep, Robert R., Suffolk, Va. Shooting at unprotected target during big game season	10.00
Roberts, Norman, E. A., Kenilworth, N. J. Possessing loaded rifle in vehicle in motion on highway	25.00
Robinson, Allen Charles, Fort Wayne, Ind. Possessing loaded rifle in vehicle standing along highway	10.00
Rohlf, Chas. E., Clifton, N. J. Transporting parts of deer unmarked	25.00
Romance, Wasil, Jr., Cleveland, Ohio. Failure to show hunter's license on demand	20.00
Roose, Dallas U., Crestline, Ohio. Possessing loaded gun in vehicle standing along highway	10.00
Roster, Sam, Ravena, Ohio. Failure to produce hunter's license upon demand	20.00
Russo, Berlin, Newark, N. J. Attempting to transport deer out of state	100.00
Ryan, Lawrence, Jackson Heights, L. I., N. Y. Attempting to transport parts of deer out of state; possessing parts of deer unlawfully; hunting without non-resident license	250.00
Schlitt, Manny, Akron, Ohio. Transporting parts of unmarked deer	25.00
Schmidt, William, Tuckerton, N. J. Hunting without non-resident license	50.00
Schnerr, Chester J., Trenton, N. J. Transporting parts of deer unmarked	25.00
Sears, James S., East Cleveland, Ohio. Transporting part of unmarked deer	25.00
Shaffer, Francis H., Canton, Ohio. Failure to show hunter's license on demand	20.00
Shaw, William H., Huguenot, Staten Island, N. Y. Making false statement to secure resident hunting license; hunting without non-resident license	70.00
Smith, Charles G., Conneaut, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Smith, Dan, Hancock, Md. Resisting inspection	100.00
Smith, Elery O., Deposit, N. Y. Hunting without resident hunting license	20.00
Smith, George G., Linden, N. J. Transporting parts of deer unmarked	25.00
Smith, LaVeon A., Washington, D. C. Possessing parts of deer unlawfully taken	100.00
Smith, Mervin Fred, Cutler, Ill. Failure to tag trap	25.00
Snyder, George B., Memphis, Tenn. Hunting without non-resident license	50.00
Soptelean, Ted, Canton, Ohio. Hunting without non-resident license	50.00
Speary, Wesley C., New York, N. Y. Transporting parts of deer unmarked	25.00
Steele, Donald L., Maplewood, N. J. Hunting without non-resident license	50.00
Stephens, Walter R., Orange, N. J. Transporting parts of deer unmarked	25.00
Stevens, Clifford A., Oakdale, Union, N. Y. Making false statement to secure hunting license; hunting without non-resident hunting license	70.00
Stockla, Peter L., Arlington, N. J. Attempting to transport parts of big game out of state	100.00
Storozuk, Theodore A., Pierpont, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Taylor, Jessop W., Cleveland, Ohio. Hunting without non-resident license	50.00
Swider, Peter, Johnson City, N. Y. Transporting parts of deer unmarked	25.00
Terlizzo, Ernest, Stanford, Conn. Transporting doe deer taken in close season; possessing doe deer taken in close season	200.00
Tohlman, Michael J., Elizabeth, N. J. Hunting without non-resident license	50.00
Tohlman, Walter J., Elizabeth, N. J. Hunting without non-resident license	50.00
Tolerton, Robert I., Alliance, Ohio. Hunting without non-resident license	50.00
Uhink, William D., Parma, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Umstader, Edwin W., Newark, N. J. Hunting without non-resident license	50.00
Vadala, Carmine A., Syracuse, N. Y. Transporting parts of deer unmarked	25.00
Wallace, Donald S., Gloversville, N. Y. Hunting without non-resident license	50.00
Walk, Stanley M., Ithaca, N. Y. Hunting without non-resident license	50.00
Walters, Charles E., Belair, Md. Hunting 2 days without non-resident license	100.00
Waltz, John R., Conneaut, Ohio. Hunting without non-resident license	50.00
Ward, Kenneth G., Cleveland, Ohio. Hunting without non-resident license	50.00
Warren, Robert J., Alexandria, Va. Attempting to kill gray squirrel in close season	10.00
Waters, Roscoe, Poulding, Ohio. Transporting untagged deer	25.00
Weyant, Paul Edmund, Alexandria, Va. Hunting without non-resident license	50.00
Wilson, William Harry, Lyndhurst, N. J. Possessing loaded rifle in vehicle in motion on highway	25.00
Wolf, Harry B., Bayonne, N. J. Hunting without non-resident hunting license; making false statement to secure resident hunting license	70.00
Yeyersky, James P., Bristolville, Ohio. Attempting to kill two deer in one season	100.00

LYCOMING—\$915.00

Alexander, Raymond W., 1114 Memorial Ave., Williamsport. Shooting at unprotected target in big game season	10.00
Bower, Edward F., R. D. 3, Williamsport. Hunting deer after closing hour	15.00
Camp, Stanton R., 1036 Cemetery St., Williamsport. Shooting at unprotected target in big game season	10.00
Castleberry, Floyd R., Trout Run. Making false statement in attempt to collect bounty	20.00
Eckman, Jacob G., 211 Sherman St., Muncy. Hunting ducks after closing hour	15.00
Gibbon, Mark L., 325 Clark St., Williamsport. Possessing loaded gun in vehicle standing along highway	10.00
Harlan, Bruce S., Trout Run. Possessing loaded rifle in vehicle in motion on highway	25.00
Houseknecht, Marvin R., R. D. 2, Hughesville. Possessing loaded rifle in vehicle in motion on highway	25.00
Knecht, Richard F., 2145 Lincoln St., Williamsport. Depositing rubbish on State Game Lands	25.00
Litzelman, Mathias S., R. D. 1, Trout Run. Possessing deer illegally taken; hunting game on Sunday; failure to tag deer within one hour	135.00
Long, Joseph C., R. D. 1, Trout Run. Hunting game on Sunday; possessing deer illegally taken	125.00
McBride, Wilbur E., 78 N. Main St., Hughesville. Possessing parts of deer unlawfully taken	100.00
Mowery, Roy E., R. D. 1, Linden. Possession loaded rifle in vehicle in motion on highway	25.00
Null, Wendell W., 420 Bennett St., Montoursville. Hunting deer in State game propagation area	25.00
Phillips, Fred L., R. D. 3, Muncy. Transporting parts of unmarked deer; possessing parts of deer unlawfully taken	125.00
Phillips, James H., 325 S. Main St., Hughesville. Possessing parts of deer unlawfully taken	100.00
Rockey, Jas. G., 313 Allegheny St., Jersey Shore. Transporting parts of unmarked deer	25.00
Spong, Wesley G., R. D. 1, Jersey Shore. Possessing parts of deer in closed season	100.00
Welch, Myron L., R. D. 1, Linden. Possessing loaded gun in vehicle standing along highway	10.00

McKEAN—\$620.00

Conner, Clifford B., Betula. Aiding and assisting to kill spike buck deer in closed season	100.00
Cunningham, Charles J., Betula. Killing spike buck deer in closed season	100.00
Cunningham, Richard M., Crosby. Aiding and assisting to kill spike buck deer in closed season	100.00
Scott, Leon, Mt. Alton. Interfering with officer in performance of his duties	100.00
Simons, Ray E., Rew City. Possessing loaded rifle in vehicle standing along highway	10.00
Stewart, Alvin L., East Smethport. Killing doe deer and spike buck in closed season	200.00
Wares, Gerald L., R. D. 3, Smethport. Failure to tag trap	10.00

MERCER—\$625.00

Anderson, Samuel J., 100 Beaver St., Mercer. Killing male deer not having two points to one antler	100.00
Atwell, John H., R. D. 4, Grove City. Hunting on special dog training area	25.00
Dart, Jess P., 75 Chambers Ave., Greenville. Shooting at target more than 200 yards from headquarters during big game season	10.00
McClung, Norville, R. D. 2, Stoneboro. Destroying tree on State Game Lands	25.00
McClimans, Alvin A., 20 Bessemer St., Greenville. Shooting at target more than 200 yards from headquarters during big game season	10.00
McQuistan, Glenn R., 1279 Griswald St., Sharon. Transporting deer not properly tagged	25.00
Seginak, Ronald G., 866 Thornton Ave., Sharon. Failure to show hunter's license on demand	20.00
Slater, George H., R. D. 1, Stoneboro. Failure to produce heads of three deer on demand of officer	300.00
Slater, James E., R. D. 1, Stoneboro. Possessing button buck deer in closed season	100.00
Thompson, Howard L., 83 S. 2nd St., Greenville. Shooting at target more than 200 yards from headquarters in big game season ..	10.00

MIFFLIN—\$790.00

Adams, Melvin B., Mattawana. Possessing spike buck in closed season	100.00
Anderson, Ralph A., Mattawana. Possessing spike buck in closed season	100.00
Corson, William A., R. D. 3, Lewistown. Possessing loaded rifle in vehicle standing along highway	10.00
Forshey, Albert R., McVeytown. Possessing doe deer in closed season	100.00
Forshey, Paul E., R. D. 1, McVeytown. Possessing doe deer in closed season	100.00
Forshey, Robert L., McVeytown. Possessing doe deer in closed season	100.00
Harmon, James L., 521 Woodland Ave., Lewistown. Failure to report shooting accident causing injury to another	25.00
Hastings, Clarence J., McVeytown. Possessing doe deer in closed season	100.00
Henry, Merle E., Yeagerstown. Shooting at unprotected target in big game season	10.00
Kauffman, Russell E., R. D. 2, Lewistown. Possessing spike buck in closed season	100.00
Macknair, Blain W., R. D. 3, Lewistown. Possessing loaded rifle in vehicle in motion on highway	25.00
Sechrist, Mervin C., R. D. 1, McVeytown. Hunting without resident license	20.00

MONROE—\$210.00

Costanzo, Harry, Pocono Lake. Possessing rabbit taken in closed season	10.00
Gardner, Lewis, Fern Ridge. Killing doe deer in closed season ..	100.00
Keiper, Nelson, Pocono Lake. Assisting to conceal deer unlawfully taken	100.00

MONTGOMERY—\$400.00

Alderfer, Vincent, R. D. 2, Telford. Permitting dogs to enter State Game Propagation Area	25.00
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Cable, Ralph E., 207 E. 5th St., Lansdale. Transporting parts of deer unmarked	25.00
Diglosa, Samuel A., 814 Vine St., Stowe. Setting traps closer than five feet from hole	10.00
Feria, Paul, 35 Berlmont Ave., Ambler. Purchasing or receiving raw furs for commercial purposes without resident permit	100.00
Fratt, Walter F., 524 Kohn St., Norristown. Transporting parts of deer unmarked	25.00
Godshall, Wilmer M., Creamery Road, Harleysville. Failure to tag seven traps	20.00
Greaser, LeRoy A., R. D. 2, Telford. Failure to tag traps; setting traps closer than five feet from holes	20.00
Huggler, Walter, Gladysne. Possessing loaded rifle in vehicle standing along highway	10.00
Kolb, Lester R., Sassamansville. Hunting in Safety Zone	25.00
Lessig, David L., 51 King St., Pottstown. Failure to tag trap	10.00
Lineberg, Stanley L., Gay St., Royersford. Disturbing traps of another	25.00
MacNeal, Gerald H., 505 Kenilworth Rd., Merion. Transporting parts of deer unmarked	25.00
Maddonna, John R., 770 Sandy St., Norristown. Failure to display license tag while hunting	20.00
Minninger, Robert W., 51 King St., Pottstown. Failure to tag one trap	10.00
Stetler, Walter S., 318 Arch St., Stowe. Shooting within 150 yards of occupied buildings	25.00
Szychowski, Alexander A., Penny Road, Sumneytown. Transporting parts of deer unmarked	25.00

MONTOUR—\$100.00

Underwood, Carl J., 100 Jefferson Court, Danville. Killing two deer in one season	100.00
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NORTHAMPTON—\$490.00

Frack, Sterling J., R. D. No. 2, Northampton. Failure to tag trap ..	10.00
Horn, Clayton M., R. D. No. 2, Bangor. Killing two antlerless deer in closed season	200.00
Meixsell, Russell, R. D. No. 2, Bath. Failure to show hunter's license on demand	20.00
Quarteroni, Dino, 9 Lahrs Court, Easton. Transporting parts of untagged deer	25.00
Rosenberg, Isidor, 118 Ferry St., Easton. Purchasing raw furs for commercial purposes without resident permit	100.00
Rowe, Gerald K., 1208 Nelson Rd., Bethlehem. Shooting while on State Park Lands	25.00
Stefan, Joseph A., 1049 First St., Hellertown. Shooting into live timber in big game season	10.00
Stevens, John W., R. D. No. 1, Danielsville. Killing antlerless deer in closed season	100.00

NORTHUMBERLAND—\$115.00

Cero, Joseph T., 314 S. Chestnut St., Mt. Carmel. Failure to display license tag while hunting	20.00
Fidler, Walter E., 1001 Lombard St., Shamokin. Transporting parts of unmarked deer	25.00
Gurskie, Jerome, 1606 Pulaskie Ave., Shamokin. Shooting at unprotected target in big game season	10.00
Klinger, Russell G., 29 Catawissa Ave., Sunbury	10.00
Lambing, Milford E., Wall St., Riverside. Failure to tag trap	10.00
Musser, Nevin M., R. D. No. 1, Milton. Hunting small game in party of more than five persons	5.00
Shaffer, Stanley D., 988 Court St., Sunbury. Possessing loaded rifle in vehicle in motion along highway	25.00
Winterstein, Nevin E., 305 Ave. F., Riverside. Failure to tag trap ..	10.00

PERRY—\$160.00

Ewing, Glen Wilson, R. D. No. 1, Newport. Failure to produce head of deer on demand of officer	100.00
Henry, Raymond W., R. D. No. 1, Blain. Using artificial light to take rabbit	10.00
Hess, Russell L., R. D. No. 1, Blain. Using artificial light to take rabbit; Hunting without resident license	35.00
Lowe, Russell A., R. D. No. 1, Newport. Transporting untagged deer	25.00

PHILADELPHIA—\$2120.00

Bode, Eric, 546 E. Westmoreland St., Phila. Possessing loaded rifle in vehicle standing along highway	10.00
Charvis, George, 1217 N. Jessup St., Phila. Hunting small game in party of more than five persons	5.00
Charvis, William, 2255 N. 13th St., Phila. Hunting small game in party of more than five persons	5.00
Cleckner, Edwin G., 3305 Gransback St., Phila. Transporting parts of unmarked deer	25.00
Dando, Harold E., 4456 N. Uber St., Philadelphia. Killing male deer not having two points to one antler	100.00
Finger, Charles W., 4136 Claridge St., Phila. Possessing loaded rifle in vehicle standing along highway	10.00
Galie, Romolo H., 5322 Stiles St., Possessing doe deer in closed season	100.00
Gettis, William J., 1901 E. Orleans St., Phila. Transporting deer unlawfully taken; Possessing deer unlawfully taken	200.00
Haines, Charles H., 545 Hig St., Phila. Transporting parts of unmarked deer	25.00
Heinly, William L., 1717 N. Newkirk St., Phila. Shooting at unprotected target in big game season	10.00
Jarick, George, 2810 N. 23rd St., Phila. Transporting parts of unmarked deer	25.00
Kelly, Thomas P., 911 Brill St., Phila. Transporting parts of unmarked deer	25.00
Klein, Walter J., 5936 N. Camac St., Phila. 41. Shooting at random in big game season	10.00
Kosloski, Anthony, 4122 Hellerman St., Phila. Transporting parts of unmarked deer	25.00
Lipski, John J., 6062 Walton St., Phila. Failure to display license tag while hunting	20.00
Louden, Samuel, 1710 N. Gratz St., Phila. Hunting small game in party of more than five persons	5.00
Malopolski, Matthew, 2734 E. Indiana Ave., Phila. Assisting to transport parts of antlerless deer taken in close season	100.00
Malopolski, Theodore W., 6050 Norwood St., Phila. Transporting parts of deer unmarked; transporting parts of antlerless deer taken in close season	125.00
March, William L., 505 W. Rising Sun Ave., Phila. Possessing and transporting parts of deer not having two points to one antler; concealing parts of deer unlawfully taken	300.00

Masarich, Joseph A., 2715 N. Park Ave., Phila. Shooting at random in big game season	10.00
Mastroieni, Nicola, 3005 N. 22nd St., Phila. Unlawfully removing dead deer from State Game Refuge	100.00
Parker, Edward R., 2525 S. 79th St., Phila. Transporting parts of unmarked deer	25.00
Rugan, John E., 4904 N. 12th St., Phila. Killing male deer in close season	100.00
Russo, Albert J., 4856 Merion St., Phila. Possessing doe deer in close season	100.00
Sampson, Johnny, 3854 Haverford St., Phila. Hunting small game in party of more than 5 persons	5.00
Scamby, Samuel, 1419 Germantown Ave., Phila. Possessing loaded rifle in vehicle standing along highway	10.00
Schieber, William A., New York Road, Matboro. Hunting without resident license	20.00
Searle, George, 112 North Paxon St., Phila. Hunting in safety zone	25.00
Searle, Horace, 5916 Chestnut St., Phila. Hunting in safety zone	25.00
Seigle, Milton C., 1417 E. Lycoming St. Transporting deer unlawfully taken; possessing deer unlawfully taken	200.00
Teague, John, 1719 N. Gratz St., Phila. Hunting small game in party of more than 5 persons	5.00
Valentino, Rudolph, 332 N. 6th St., Phila. Failure to tag parts of deer in transportation	25.00
Vendecchio, Nunzio A., 4944 W. Thompson St., Phila. Possessing doe deer in close season	100.00
Verrecchio, Ido J., 3910 N. 6th St., Phila. Assisting to conceal parts of deer not having two points to one antler; possessing parts of deer not having two points to one antler	200.00
Vincent, Clarence, 1715 N. Gratz St., Phila. Hunting small game in party of more than 5 persons	5.00
Webb, Robert G., 6148 Lindbergh Blvd., Pewchall. Shooting in Park Area	25.00
Zukosky, John S., 6333 Mereshon St., Phila. Transporting two rabbits unaccompanied by owner	20.00

PIKE—\$120.00

Benson, Reynold, M. Failure to tag one steel trap	10.00
Parker, Robert K., 2nd & 3rd Sts., Matamoras. Failure to visit trap every 36 hours	10.00
Singer, Clinton E., Star Route, Hawley. Possessing parts of doe deer during close season	100.00

POTTER—\$110.00

Beals, Gordon E., R. D. No. 3, Coudersport. Possessing parts of antlerless deer in close season	100.00
Bundy, Leon R., Austin. Possessing loaded rifle in vehicle standing along highway	10.00

SCHUYLKILL—\$35.00

Maurer, William L., 900 Walnut St., Ashland. Possessing loaded rifle in vehicle standing along highway	10.00
Levan, Wilson E., 214½ W. Center St., Shenandoah. Hunting game after closing hour	15.00
Sattizahn, Willard D., Pine Grove, R. D. Possessing skin of fur bearing animal unlawfully taken	10.00

SNYDER—\$80.00

Haines, Harvey A., Beaver Springs. Possessing loaded shotgun in vehicle standing along highway	10.00
Lessman, Glenn S., R. D. No. 3, Middleburg. Shooting at target more than 200 yds. from headquarters in big game season	10.00
Long, Homer A., R. D. No. 1, Richfield. Possessing loaded rifle in vehicle standing along highway	10.00
Mengle, Kenneth L., R. D., Mt. Pleasant Mills. Shooting at target more than 200 yds. from headquarters in big game season	10.00
Mitchell, Cloyd C., R. D., Middleburg. Possessing loaded rifle in vehicle standing along highway	10.00
Reigle, Richard S., Freeburg. Hunting for migratory waterfowl with unplugged gun	10.00
Rief, Frank A., Port Trevorton. Staking out two traps for fur bearer other than beaver or other prior to opening hour	20.00

SOMERSET—\$25.00

Bovel, George, 207 Seventh St., Windber. Attempting to kill ringneck hen	25.00
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SULLIVAN—\$60.00

McClintock, Ezra A., R. D., Muncy Valley. Possessing loaded rifle in vehicle in motion on highway	25.00
Montague, Jason A., R. D. No. 1, Muncy Valley. Possessing loaded rifle in vehicle in motion along highway	25.00
Rohe, Melvin E., R. D. No. 2, Dushore. Possessing loaded rifle in vehicle standing along highway	10.00

SUSQUEHANNA—\$365.00

Davis, Thomas W., 610 Hudson St., Forest City. Throwing artificial light upon deer while in possession of firearm	100.00
Forsythe, Gordon G., Great Bend. Staking out or setting five traps for muskrat prior to the opening hour	50.00
Crum, Louis, Susquehanna Ave., Forest City. Transporting parts of unmarked deer	25.00
Lambertson, Gilbert W., R. D. No. 1, Thompson. Possessing parts of buck deer in close season	100.00
Lowry, James H., 417 Main St., Forest City. Possessing loaded rifle in vehicle in motion along highway	25.00
MacBain, Roger C., Hop Bottom. Transporting unmarked deer	25.00
Stone, Everett D., Thompson, R. D. Hunting while hunting rights have been denied	40.00

TIOGA—\$295.00

Cowan, Franklin N., R. D. No. 2, Covington. Possessing buck deer not legally tagged	25.00
Draper, Gerald I., R. D. No. 1, Sabinsville. Possessing loaded gun in vehicle while standing along public highway	10.00
Gleason, Raymond W., R. D. No. 1, Tioga. Possessing loaded shotgun in vehicle standing along highway	10.00
Hazlett, Leon N. Possessing loaded rifle in vehicle in motion along highway	25.00
Healey, Donald H., P. O. Box 116, Nelson. Possessing loaded rifle in vehicle in motion on highway	25.00
Heysham, Kenneth W., Nelson. Possessing loaded rifle in vehicle in motion along highway	25.00

Holslander, Fred B., Mainsburg. Shooting within 150 yds. of occupied building	25.00
Kemp, Robert P., P. O. Box 103, Nelson. Possessing loaded rifle in vehicle in motion along highway	25.00
Seely, Clayton L., Westfield. Killing two deer in one season	100.00
Shutter, Fred H., R. D. 1, Tioga. Shooting at unprotected target during big game season	10.00
Taylor, Lewis C., R. D. No. 6, Wellsboro. Shooting within 150 yds. of occupied building	25.00

UNION—\$125.00

Aikey, Lewis H., R. D. No. 1, Mifflinburg. Possessing doe deer taken in close season	100.00
Mathews, George B., 220 N. 2nd St., Lewisburg. Possessing loaded rifle in vehicle in motion along highway	25.00

VENANGO—\$230.00

Armstrong, Paul B., R. D. No. 1, Diamond. Destroying tree on State Game Land	25.00
Harwick, Richard L., Reno. Possessing loaded shotgun in vehicle used as blind to kill game	25.00
Holtz, Norman W., R. D. No. 2, Oil City. Shooting at unprotected target in big game season	10.00
Loll, Otto A., Plum St., Oil City. Shooting at unprotected target in big game season	10.00
McFarland, Richard K., 119 Norman St., Franklin. Failure to show hunter's license on demand	20.00
McCall, Merle C., Jr., Box 258, Rouseville. Destroying one tree on State Game Land	25.00
Shaffer, Charles E., R. D. No. 2, Cranberry. Hunting two days while hunting rights have been denied; hunting deer on Sunday	105.00
Stark, Edwin M., 60 Holiday St., Oil City. Possessing loaded shotgun in vehicle standing along highway	10.00

WARREN—\$235.00

Carmany, Daniel G., Railroad St., Clarendon. Disturbing trap of another	25.00
Drukenbrod, John E., R. D. No. 1, Tidioute. Possessing parts of deer in close season	100.00
Lindell, Roger B., R. D. No. 2, Akeley. Possessing loaded rifle on vehicle standing along highway	10.00
Pellegrino, James P., 12 Schantz St., Warren. Killing spike buck deer	100.00

WAYNE—\$385.00

Bates, Louis H., Star Route, Honesdale. Possessing loaded rifle in vehicle in motion along highway	25.00
Canfield, Floyd F., Star Route, Damascus. Possessing loaded rifle in vehicle in motion on highway	25.00
Loomis, Leland G., R. D. No. 1, Waymart. Possessing loaded rifle in vehicle in motion along highway	25.00
Martone, Vincent J., 537 Main St., Honesdale. Failure to tag big game in transport	25.00
O'Boyle, Robert G., Gouldsboro. Failure to display hunting license while trapping; failure to tag traps	50.00
Rasmussen, John T., South Sterling. Possessing parts of deer unlawfully taken	100.00
Rollison, Clyde R., Sellyville. Possessing a loaded rifle in vehicle standing along highway	10.00
Smith, Elery O., R. D. No. 1, Deposit, N. Y. Hunting without resident license	20.00
Sonsone, Anthony, R. D. No. 4, Honesdale. Trapping without resident license; possessing six muskrat skins taken in close season	80.00
Tether, Charles E., Chestnut E., Chestnut Ave., Hawley. Possessing parts of fur-bearing animal in close season	50.00
Tomazin, Edward L., 200 Marion St., Forest City. Raising mink without permit	25.00

WESTMORELAND—\$180.00

Colombin, Daniel C., Kerr St., Grapeville. Shooting at unprotected target in big game season	10.00
Fischer, Fred G., Jr., R. D. No. 1, Belle Vernon. Failure to display hunting license while hunting	20.00
Kuhns, John H., 26 Ave. D, Latrobe. Failure to display hunting tag while hunting	20.00
Rager, William E., R. D. No. 6, Greengburg. Shooting at unprotected target in big game season	10.00
Rayer, John C., R. D. No. 1, Vandergrift. Possessing loaded rifle in vehicle standing along highway	10.00
Ustazewski, Alex, R. D. No. 1, Irwin. Possessing loaded rifle in vehicle standing along highway	10.00
Zanotti, Dominick M., 142 Lincoln Ave., Vandergrift. Throwing artificial light upon deer while in possession of rifle	100.00

WYOMING—\$420.00

Ciprick, Joseph, R. D. No. 2, Laceyville. Transporting parts of big game untagged	25.00
Clark, Warren E., Factoryville, R. D. No. 2. Possessing loaded rifle in vehicle in motion on highway	25.00
Corby, Edward, R. D. No. 1, Falls. Possessing part of illegal muskrat	10.00
Dougar, John T., Jr., R. D. No. 1, Trucksville. Transporting parts of unmarked deer	25.00
Engle, John H., R. D. No. 4, Tunkhannock. Failure to tag trap	10.00
Layaou, Francis B., R. D. No. 5, Tunkhannock. Possessing deer unlawfully taken	100.00
Rosengrant, Arnold D., 56 West St., Tunkhannock. Possessing parts of buck deer unlawfully taken	100.00
Shaw, Robert B., Laceyville. Transporting part of unmarked deer	25.00

YORK—\$200.00

Brenner, Dale E., 748 W. College Ave., York. Possessing loaded rifle in vehicle standing along highway	10.00
Etzweiler, Charles A., Columbia. Possessing loaded rifle in car standing along highway	10.00
Meckley, Clark E., Seven Valleys. Making false declaration of date of killing in attempt to collect bounty on fox	10.00
Moxley, Roy E., Delta. Hunting without non-resident license	100.00
Reinburg, S. Cletus, 151 Springetbury Ave., York. Possessing loaded shotgun in car standing along highway	10.00
Rittenhouse, George, Wrightsville. Possessing loaded rifle in vehicle in motion along highway	25.00

Rosenberry, Sidney L., R. D. No. 2, New Freedom. Shooting at unprotected target in big game season	10.00
Schwartzter, John E., 262 E. Market St., York. Possessing loaded rifle in vehicle in motion along highway	25.00
NON-RESIDENTS—\$9385.00	
Acheson, Levi D., Elyrin, Ohio. Transporting deer not properly tagged	25.00
Ackley, Lester Wallace, Vestal, N. Y. Shooting at unprotected target in big game season	10.00
Adkins, Willard S., Akron, Ohio. Transporting parts of big game unmarked	25.00
Alu, Charles B., Trenton, N. J. Possessing parts of doe deer unlawfully taken	100.00
Bagnasco, Peter A., Brooklyn, N. Y. Possessing loaded rifle in vehicle in motion on highway	25.00
Bailey, Lawrence F., Stanford, Conn. Killing doe deer in close season	100.00
Bailey, William L., Stanford, Conn. Hunting without non-resident license; assisting to conceal doe deer unlawfully killed ..	150.00
Barber, Watson L., Cliffwood, N. J. Hunting after license has been seized by officer	20.00
Barghetti, Ernest J., Youngstown, Ohio. Failure to show hunter's license on demand	20.00
Barton, Stanford C., Shreve, Ohio. Buying dead deer	100.00
Beach, Andrew, Woodbury, N. J. Hunting without non-resident license	50.00
Berg, Kurt F., Glendale, N. Y. Transporting parts of deer unmarked	25.00
Black, Lloyd O., Athens, Ala. Attempting to take beaver in close season; hunting without non-resident license; making false statement to secure hunting license	120.00
Blackford, Marion C., Conover, Ohio. Possessing deer unlawfully killed; buying two dead deer	300.00
Blanda, Daniel N., Brooklyn, N. Y. Possessing illegal deer; attempting to transport illegal deer out of state	200.00
Blank, Robert, Swan Lake, N. Y. Purchasing raw furs for commercial purposes without non-resident permit	200.00
Bowman, Kenneth E., Shreve, Ohio. Buying dead deer	100.00
Bowmaster, Arthur R., Gamfrills, Md. Transporting parts of unmarked deer	25.00
Brown, Alfred A., Arlington, Va. Giving false statement to secure hunting license; hunting without non-resident license	70.00
Buslirk, Billy W., Logan, West Va. Hunting without non-resident license	50.00
Busse, William M., Massillon, Ohio. Failure to produce identification upon demand of officer	20.00
Carter, Joseph T., Fairview, N. J. Transporting parts of big game unmarked; hunting without non-resident license; attempting to transport parts of big game out of state; possessing parts of deer unlawfully taken	275.00
Caseman, Howard G., Endicott, N. Y. Possessing loaded rifle in vehicle in motion on highway	25.00
Cavallo, Anthony, Hoboken, N. J. Transporting one rabbit out of state illegally; possessing rabbit in close season	20.00
Chandler, Woodrow W., Fort Dix, N. J. Hunting without non-resident license	50.00
Cockerill, Eugene P., Washington Court House, Ohio. Possessing loaded shotgun in vehicle standing along highway	10.00
Cole, George W., Flemington, N. J. Transporting parts of deer unmarked	25.00
Coleman, Edward W., Omaha, Neb. Hunting without non-resident license	50.00
Coolbaugh, William W., Millport, N. Y. Possessing loaded rifle in vehicle standing along highway	10.00
Craig, Howard F., Lowellville, Ohio. Hunting without non-resident license	50.00
Crouse, Arthur S., Vestal, N. Y. Trapping without non-resident license	50.00
Deible, Robert H., Crown Point, Ind. Failure to show hunter's license on demand	20.00
Dennis, Andrew, Newark, N. J. Transporting part of deer unmarked	25.00
Dodds, Jess E., W. Orange, N. J. Hunting deer in Auxiliary State Game Refuge	100.00
Dutch, Carl E., East Palestine, Ohio. Failure to show hunter's license on demand	20.00
Eakle, Joseph F., Jr., Hagerstown, Md. Hunting without non-resident license	50.00
Ebener, Harry J., Washington, D. C. Hunting without non-resident license	50.00
Effes, Paul L., Toledo, Ohio. Transporting parts of unmarked deer	25.00
Ferrara, Frank, Brooklyn, N. Y. Aiding in concealing possession of illegal doe deer; attempting to transport it out of state ..	200.00
Findlay, Andrew, Kearny, N. J., Hunting one day without non-resident license; making false statement to secure hunting license	70.00
Fitzgerald, James C., ———, Delaware. Possessing loaded rifle in vehicle standing along highway	10.00
Flickinger, Earl R., Shreve, Ohio. Buying dead deer	100.00
Freiwald, Richard K., Roselle Park, N. J. Hunting without non-resident license	50.00
Frisbie, John C., Johnson City, N. Y. Transporting parts of deer out of state	100.00
Fry, Dale W., Hilton, N. Y. Hunting without non-resident license	50.00
Garfinkel, Sheldon A., Liberty, N. Y. Assisting to purchase raw furs for commercial purposes without non-resident permit ..	200.00
Gasior, Joseph L., Jersey City, N. J. Attempting to transport parts of deer out of state; transporting parts of deer unmarked ..	125.00
Gill, Clarence A., Akron, Ohio. Transporting parts of unmarked deer	25.00

Greenawalt, William B., Akron, Ohio. Transporting parts of unmarked deer	25.00
Hall, Clarence O., Meriden, Conn. Transporting deer unmarked ..	25.00
Hall, Garth E., Elmira, N. Y. Transporting parts of big game unmarked	25.00
Hallett, Erwin A., Windham, Ohio. Hunting without a non-resident license	50.00
Hammrich, John C., Brooklyn, N. Y. Making false statement to secure hunting license	20.00
Hawley, Edward A., Binghamton, N. Y. Attempting to transport parts of deer out of state	100.00
Hearn, James P., Zanesville, Ohio. Hunting without non-resident license	50.00
Hirleman, Jay I., Litchfield, Conn. Making false statement in securing hunting license; hunting without non-resident license; attempting to transport deer out of state	170.00
Hirleman, Thomas J., Thomaston, Conn. Hunting without non-resident license; making false statement in securing hunting license; assisting to conceal deer unlawfully killed; attempting to transport deer out of state	270.00
Hogarth, John P., Mariners Harbor, N. Y. Transporting parts of deer taken in close season; possessing parts of antlerless deer taken in close season; transporting parts of deer unmarked ..	225.00
Iannantuoni, Carmine M., Newark, N. J. Attempting to transport parts of deer out of state	100.00
Johannings, Eberhardt, H., Little Falls, N. J. Hunting deer in Auxiliary State Game Refuge	100.00
Johnson, Carroll L., Cincinnati, Ohio. Hunting without non-resident license	50.00
Johnston, Byron E., Pierpont, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Judy, James W., Burgh Hill, Ohio. Hunting without non-resident license; giving false information to secure hunting license ..	70.00
Kemmerer, George B., Salisbury, Md. Hunting without non-resident license	50.00
Kiebler, Paul E., Chardon, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Kiesche, Frederick P., Ridgefield, N. J. Transporting hare taken in close season; possessing hare taken in close season	20.00
King, Francis R., Providence, R. I. Transporting parts of deer unmarked	25.00
King, John L., Washington, D. C. Possessing parts of deer unlawfully taken	100.00
Kreger, Paul O., Wooster, Ohio. Buying dead deer	100.00
Kriel, Michael, Astoria, N. Y. Hunting for deer with use of artificial light	100.00
Kull, John F., Virginia Beach, Va. Hunting without non-resident license	50.00
Latchaw, Harrison B., Parma, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Lingebach, John C., Landover, Md. Possessing loaded rifle in vehicle standing along highway	10.00
Lutz, George A., Cleveland, Ohio. Killing deer with automatic shotgun	100.00
McCambell, Paul, Avon Lake, Ohio. Hunting without non-resident license	50.00
McConnell, Robert W., Cleveland, Ohio. Transporting parts of unmarked deer	25.00
McGowan, Joseph J., Newark, N. J. Hunting without non-resident license; making false statement to secure hunting license	70.00
McCloy, Louis, East Starta, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Mackowski, Stanley G., Bridgeport, Conn. Possessing loaded rifle in vehicle standing along highway	10.00
Mahon, Richard LeRoy, Buffalo, N. Y. Attempting to transport game animal out-of-state	100.00
Mattox, Charles E., Dayton, Ohio. Failure to produce head of deer on demand	100.00
Matuszewski, Joseph W., Trenton, N. J. Hunting without non-resident license	50.00
Mealy, William V., Newark, N. J. Hunting without non-resident license	50.00
Megan, George A., Monica, N. Y. Possessing loaded rifle in vehicle along highway	10.00
Metzinger, Marty J., New Milford, N. J. Attempting to take deer in close season; throwing artificial light on deer while in possession of rifle	200.00
Merkrantz, Paul H., Camden, N. J. Hunting without non-resident license	50.00
Milak, Arthur G., Bordentown, N. J. Attempting to kill two deer in one season	100.00
Miller, Anthony W., Cleveland, Ohio. Hunting without non-resident license	50.00
Moore, Edward R., Shoreham, Long Island, N. Y. Hunting without non-resident license; possessing loaded rifle in vehicle in motion on highway	75.00
Morykon, Michael, Newark, N. J. Making false statement to secure hunting license	20.00
Munger, Virgil F., Cecil, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Murray, Lindsey, Jr., Hamilton, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Nesfeder, Carl J., Syracuse, N. Y. Transporting parts of deer unmarked	25.00
Oehrlein, Peter, Glendale, N. Y. Possessing loaded rifle in vehicle in motion on highway	25.00
Ostermann, John, Glendale, N. Y. Hunting two days without non-resident license; making false statement to secure hunting license	120.00
Petronchak, Wassail, Jr., Lyndhurst, N. J. Killing spike buck deer	100.00

Cases Settled During the Month of January, 1949

ADAMS—\$720.00	
Chapman, Robert, R. D. 1, Ortanna. Assisting in killing two deer illegally	\$200.00
Patterson, Harry, Jr., Iron Springs. Assisting in killing two deer illegally	200.00
Rummel, Grant W., Biglerville. Setting two steel traps closer than 5 ft. from holes	20.00

Swisher, Scott, R. D. 1, Iron Springs. Assisting in concealing two deer in closed season	200.00
Ziegler, Thos. Rhey, Box 35, Gardners. Attempting to kill doe deer in closed season	100.00
ALLEGHENY—\$100.00	
Mucha, Michael, 308 Torrence Avenue, Carnegie. Using parts of unlawfully killed deer	100.00

BERKS—\$85.00

Leibelsberger, Paul Richard, R. D. 1, Kutztown. Failure to tag traps and disturbing traps of another	45.00
Trawitz, Lewis, 115 N. Miller St., Shillington. Dog chasing and killing rabbit in closed season	15.00
Weidman, William, R. D. 1, Robesonia. Molesting traps of another	25.00

BLAIR—\$200.00

Elvey, Frederick, 309 Fourth St., Altoona. Killing male deer not having two or more points to one antler	100.00
Kaesbauer, George, 1314 Walton Ave., Altoona. Hunting deer with automatic rifle	100.00

BRADFORD—\$125.00

Gebhard, William, R. D. 2, Leraysville. Possessing antlerless deer in closed season	100.00
Woodruff, Clifford, Wyalusing. Possessing loaded rifle in vehicle in motion on highway	25.00

BUCKS—\$30.00

Miller, Emma, Upper Black Eddy. Hunting without resident license	20.00
Sweinhardt, Carl, R. D. 1, Quakertown. Possessing muskrats taken in closed season	10.00

CENTRE—\$665.00

Cingle, Anthony, Clarence. Possessing parts of deer killed in closed season	100.00
Clinger, John, R. D. 1, Centre Hall. Possessing parts of deer killed in closed season	100.00
Davis, Edward, Clarence. Possessing parts of deer killed in closed season	100.00
Dullen, John, R. D. 2, Howard. Possessing unlawfully killed deer	100.00
Gamber, William, R. D. 1, Bellefonte. Hunting without resident license	20.00
Keiser, David Frederick, Nittany Dorm 23, State College. Hunting without resident license	20.00
Kline, Donald, R. D. 1, Bellefonte. Shooting within 150 yds. of occupied building	25.00
Meyers, Joseph, Pleasant Gap. Unlawfully removing dead deer from S.G.P. area	100.00
Muirhead, John, Clarence. Assisting in taking deer in closed season	100.00

CHESTER—\$50.00

Jackson, Robert, 119 W. Barnard St., West Chester. Trapping muskrats during closed season	30.00
McAvoy, Thomas, 3rd, 520 Main St., Phoenixville. Possessing loaded rifle in vehicle standing along highway	10.00
Young, Walter, West Chester. Possessing a loaded rifle in vehicle standing along highway	10.00

CLEARFIELD—\$55.00

Grove, Fern, R. D., Olanta. Transporting untagged deer	25 days
Rowles, Denton, R. D., Curwensville. Hunting game after closing hour	15.00
Soliday, Ralph, R. D., Grampian. Hunting while hunting rights have been denied	40.00

CLINTON—\$10.00

Knepley, William, 136 13th St., Renovo. Killing protected bird ..	10.00
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COLUMBIA—\$45.00

McHenry, Zender, R. D. 1, Orangeville. Hunter injuring livestock ..	25.00
Rupert, Carl, R. D. 3, Bloomsburg. Attempting to defraud the Commonwealth by giving false dates in claim for bounty on two skins	20.00

CUMBERLAND—\$145.00

Bernhisel, Robert, R. D. 1, Carlisle. Killing two rabbits in closed season	20.00
Blauser, Jay, 523 W. Simpson St., Mechanicsburg. Attempting to kill doe deer in closed season	100.00
Neff, Elmer B., Mt. Holly Springs. Shooting within 150 yds. of occupied building	25.00

DAUPHIN—\$460.00

Eissner, Chester J., 227 Broad St., Harrisburg. Attempting to kill doe deer in closed season	100.00
Geib, Harvey K., 333 Pine St., Middletown. Attempting to kill doe deer in closed season	100.00
Koppenhaver, Charles A., Jr., R. D., Millersburg. Setting trap closer than 5 ft. from hole	10.00
Lenker, Robert E., R. D., Millersburg. Killing two rabbits over season bag limit	20.00
Lenker, Warren T., R. D., Millersburg. Setting trap closer than 5 feet from hole	10.00
Pipp, Joseph C., 635 Radner St., Harrisburg. Attempting to kill doe deer in closed season	100.00
Rissinger, Robert W., R. D., Millersburg. Killing rabbit over daily bag limit	10.00
Romberger, Earl E., R. D., Millersburg. Killing female deer in closed season	100.00
Straup, Elwood R., R. D., Millersburg. Killing rabbit over season bag limit	10.00

DELAWARE—\$50.00

Griggs, Frank J., 402 Printz Ave., Essington. Transporting parts of unmarked deer	25.00
Harbison, Samuel M., Jr., 530 Riverview St., Swarthmore. Shooting within 150 yds. of occupied building	25.00

ELK—\$47.00

Eckert, Alphonse A., Benzinger, R. D., St. Marys. Failure to take up two traps at close of season	20.00
Josephson, David W., 515 Front St., Ridgway. Destroying tree on State Game Lands	25.00
Zambanini, Leno, R. D., Weedville. Failure to report killing of deer within 5 days	2.00

FRANKLIN—\$10.00

Gordon, Frank E., R. D. 3, Mercersburg. Failure to tag traps ..	10.00
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FULTON—\$10.00

Martin, Roy, R. D. 1, Needmore. Making false declaration in the date of killing one gray fox	10.00
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JEFFERSON—\$100.00

Davis, Russell V., R. D., Brockway. Killing male deer in closed season	100.00
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JUNIATA—\$50.00

Baitsell, Charles E., R. D. 1, Mifflintown. Conspiring and attempting to collect bounty on weasel	25.00
Shirk, Edgar S., R. D. 1, Richfield. Cutting a den tree for a raccoon	25.00

HUNTINGDON—\$30.00

Didyk, Jacob, R. D., Todd. Falsifying date in the killing of three weasels	30.00
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LACKAWANNA—\$70.00

Blumer, Jacob, R. D. 3, Moscow. Attempting to defraud the Commonwealth through collection of bounty	25.00
Hall, Maurice H., R. D. 1, Clarks Summit. Dog chasing deer	25.00
Snyder, Melvern C., 324 Virginia Ave., Peckville. Giving false dates to collect bounty on two weasels	20.00

LANCASTER—\$180.00

Flester, Harry E., R. D. 1, Christiana. Making false declaration of date of killing one weasel, in attempt to collect bounty ..	10.00
Frey, David E., R. D. 2, Conestoga. Making false declaration of date of killing in attempt to collect bounty on one weasel ..	10.00
Miller, Kenneth E., 20 N. Spruce St., Lititz. Killing ringneck hen pheasant	25.00
Salzman, Frederick, 137 S. 4th St., Columbia. Attempting to kill hen pheasants in closed season	25.00
Shirk, David M., R. D. 1, Narvon. Making false declaration of date of killing in attempt to collect bounty on one weasel ..	10.00
Shirk, Harvey M., 15 W. Maple St., Lititz. Attempting to kill hen pheasant	25.00
Ziemer, Noah E., Blue Ball. Making false affidavit in attempt to collect bounty on one fox	25.00
Ziemer, Phineas M., R. D. 1, East Earl. Making false declaration of date of killing in attempt to collect bounty on five weasels	50.00

LEHIGH—\$40.00

Stauffer, Ray J., R. D. 2, Coopersburg. Taking two muskrats in closed season; failure to display license tag while trapping	40.00
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LUZERNE—\$190.00

Bonning, Sol, R. D. 1, Dallas. Attempting to defraud the Commonwealth through the collection of bounty	25.00
Matthias, Claude W., Kis-Lyn. Transporting parts of unmarked deer	25.00
Whitney, William B., R. D. 1, Trucksville. Possessing four green muskrat skins more than 10 days after season	40.00
Ziminisky, Joseph J., Sr., R. D. 1, White Haven. Possessing parts of deer unlawfully taken	100.00

LYCOMING—\$265.00

Bigger, Beulah P., 21 Sixth St., Williamsport. Depositing garbage on State Game Lands	25.00
Griffith, Felix V., R. D. 2, Cogan Station. Possessing deer unlawfully taken	100.00
Merrick, Elmer D., 464 Elmira St., Williamsport. Failure to tag trap set for muskrats	10.00
Merrick, Richard W., 406 East Mountain Ave., South Williamsport. Failure to tag trap set for muskrats	10.00
Shick, Perry M., R. D. 2, Montoursville. Giving false information in securing resident hunter's license	20.00
Willits, William C., R. D. 1, Jersey Shore. Possessing part of deer in close season	100.00

McKEAN—\$115.00

Guelfi, Henry, 181 High St., Bradford. Hunting game prior to opening hour of first day	15.00
Lloyd, Carney B., Box 17, Duke Center. Possessing spike buck deer in close season	100.00

MIFFLIN—\$20.00

Shank, Oliver A., R. D. 1, Milroy. Attempting to collect bounty on one red fox killed beyond four month limit	10.00
Stricker, Norman C., Yeagertown. Attempting to collect bounty on one weasel killed beyond four month limit	10.00

MONROE—\$25.00

Englert, Harold E., Canadensis. Attempting to defraud the Commonwealth through collection of bounty	25.00
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MONTGOMERY—\$155.00

Kline, Clarence H., Hunsberger Apts., Souderton. Making false declaration of date of killing in attempt to collect bounty on weasel	10.00
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COVER

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"GIVE WILDLIFE A BRAKE"

Somewhere along the highway this spring you will see a small, bewildered rabbit make its last leap. On some evening you may see a surging whitetail deer pause too long on the macadam. It may be a strutting ringneck cock, an ambling muskrat, or only a lowly skunk, but this spring and next summer the chances are that you in your car will hurtle headlong towards some creature of the wild.

Later, perhaps, you will see those birds and animals sprawled along the edges of the highway—still, crushed, and lifeless. Along every road they lie, victims of this mechanized age. What was once a noble deer now is a blood-stained mass of broken bones and twisted flesh; once a lively bunny, now a flattened bit of torn fur. Possibly, a former magnificent pheasant will lie in tragic death, its wings fractured and its powerful heart still forever. Further on a grouse or an opossum or a squirrel may be flattened on the cement. For them, man's modern highway is but a ribbon of death.

True, killing or death is never a pretty picture, especially along the highway. Yet death comes so easily in an automotive era. A ton or more of chromium plated, mechanically perfect machinery, racing forward with the power of a hundred horses—your car—can be a perfect instrument of destruction to wildlife. Today, it is one of the causes for the scarcity of our wildlife.

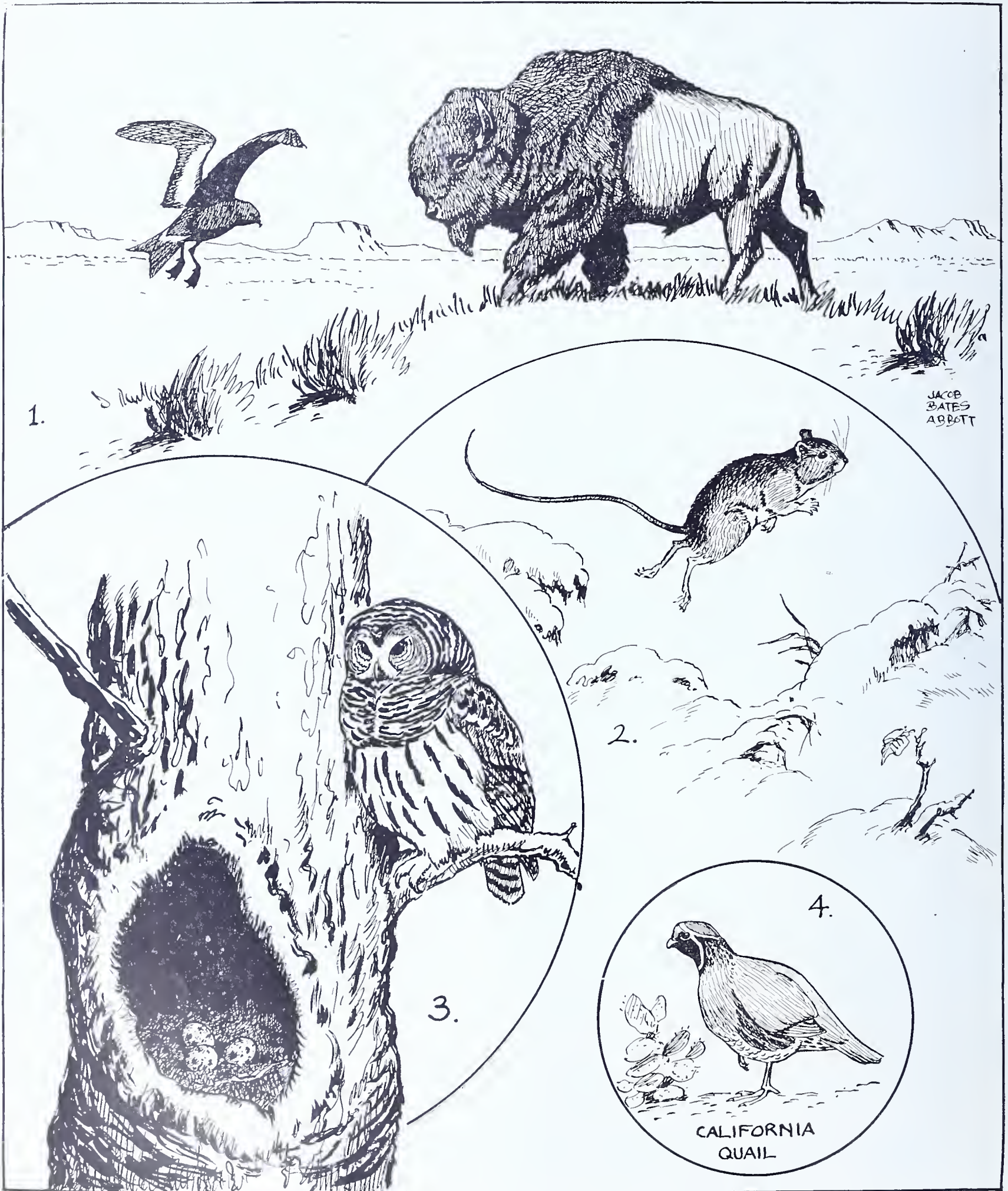
Last year at least 99,000 innocent wild animals were victims of this mechanized slaughter—99,000 by actual count—not estimated—counted by employees of the Pennsylvania Department of Highways. Think of it! Almost three hundred creatures of the wild known to have been brutally slaughtered every single day of last year. How many more casualties, no one knows—but many more!

Those animals and birds, helpless in the path of our speeding vehicles, now lie buried along the highways—a total loss and a terrible toll.

Spring on the highway is a dangerous season for birds and animals of field and forest. This spring—slow down—especially when traveling through game country. Give wildlife a "brake"! Drive Carefully and at moderate speeds—conserve your car, your oil, gas and tires. Save wildlife—and maybe your own life!

Well, What's Wrong?

Answers on Page 32



1.

JACOB
BATES
ABBOTT

2.

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4.

CALIFORNIA
QUAIL

TOO MANY DEER

BY EARL C. TUBERSON



THE LONG lines of automobiles, carrying one, two, and sometimes three deer, seen on the highways of Pennsylvania during the first two weeks of December, graphically indicate this state's reputation as one of the most heavily deer-populated regions of the nation. These lengthy caravans of cars, more numerous in the northwestern part of the state, especially in Potter, Cameron, Elk, and Warren counties, and in towns like Warren, St. Marys, Ridgway, DuBois, and Emporium, illustrate this fact far better than any statistics possibly could. Last year, approximately 500,000 hunters invaded the forests in their search for bucks. During an ordinary buck season, the total number of deer killed runs into the tens of thousands. An even greater number of deer are slain during a combined buck and antlerless deer season, such as in 1947, when the total kill numbered approximately 92,000 deer. (30,000 legal bucks and 62,000 legal antlerless deer.)

The 1947 combined season was received with opposition from many quarters. Doe season is, has been, and probably always will be a touchy subject among Pennsylvania hunters. Many people term it "mass-murder" and argue that doe season will bring about the extinction of deer in this state. During 1947, numerous sportsmen's organizations in the state loudly protested the Pennsylvania Game Commission's decision to have a one-day season for doe. Opposing these sportsmen were the people who regarded doe season as beneficial to the future Pennsylvania deer herd.

Regardless of what has been said about the matter, this simple fact remains: There

are too many deer in Pennsylvania. But you may ask: "How many deer are too many?" There are too many deer when there are more deer than there is food for them to eat—in other words, when the demand for food exceeds the supply.

What causes the deer herds to grow so large? It is because deer multiply rapidly. During a mating season, one buck usually claims three or more doe as mates. According to simple, biological mathematics, the mating of one buck with one doe can start a family tree that will number 6,925 descendants in only 22 years! Feeding the 6,925 descendants of many parent deer becomes quite a task. When the number of deer becomes so large that natural food supplies are inadequate, overpopulation exists. Starvation is the inevitable result of such overpopulation, bringing with it farm and orchard crop destruction, and forest damage.

Hungry deer inflict a surprising amount of damage upon orchards and farms. The cause of this damage can be traced directly to the starvation of deer through overpopulation of an area. When deer exhaust their natural feeding sources in the forests they start invading farms and orchards in their search for foods, such as apples and different kinds of grain. As a result, they leave a path of destruction that causes the landowner much grief. Knowledge of the farmer's plight was brought to light in 1929, when 75 landowners from Cambria County presented a petition to the Pennsylvania Game Commission, asking for immediate relief from deer destruction, which, they stated, was causing some farmers to abandon their property completely. More recently, in 1947, landowners from more than 30 counties again asked for relief from deer damage. Since 1929, such measures as erecting deer-proof fencing, trapping deer alive for transportation to areas sparsely populated with deer, and permitting landowners to kill any deer caught in the act of destroying property, have been tried; but these measures have not solved the problem by any means. The trapping of deer and fencing in of farm lands proved to be too expensive to be carried out extensively, while the killing of deer destroying property, though still in effect, has not remedied this condition. In 1947, 1644 deer were killed to protect property.

Starving deer also cause extensive damage to the forests of Pennsylvania where conservation is of the utmost importance in fighting erosion and building up future timber reserves. It has been estimated that

in sections where the deer population has passed the saturation point, ten or even twenty years may be required to bring these areas back to their former state of growth because the deer have used every bit of their natural food supply and in doing so have consumed the seedling plants that are the beginning of the new forest. "Browsing," that is the eating of tender shoots, twigs and leaves of various trees and shrubs, and "barking" of large areas of woodlands cause this damage. Barking, which is the stripping of bark from tree trunks by deer for eating purposes, takes place during the winter months when the supplies of food are very low. Barking, however, causes much less damage than browsing. The highest point where browsing takes place on trees and shrubs is known as the "deer-line"; thus a severe winter will cause the deer-line to rise higher than the line for a previous mild winter. During such a severe winter, the deer sometimes stand upright on their hind legs in order to browse, causing the deer-line to run as high as eight feet. In this manner, the deer-line can be used as an index in judging the degree of starvation the deer experience during a particular winter.

In addition to reducing future feeding material for the deer, overbrowsing depletes the amount of food and cover for small game.

Many species of forest trees and shrubs are browsed by deer: oak, cherry, maple, ash, hemlock, spruce, pine, sweet fern, blueberry, hazel, laurel, and rhododendron.

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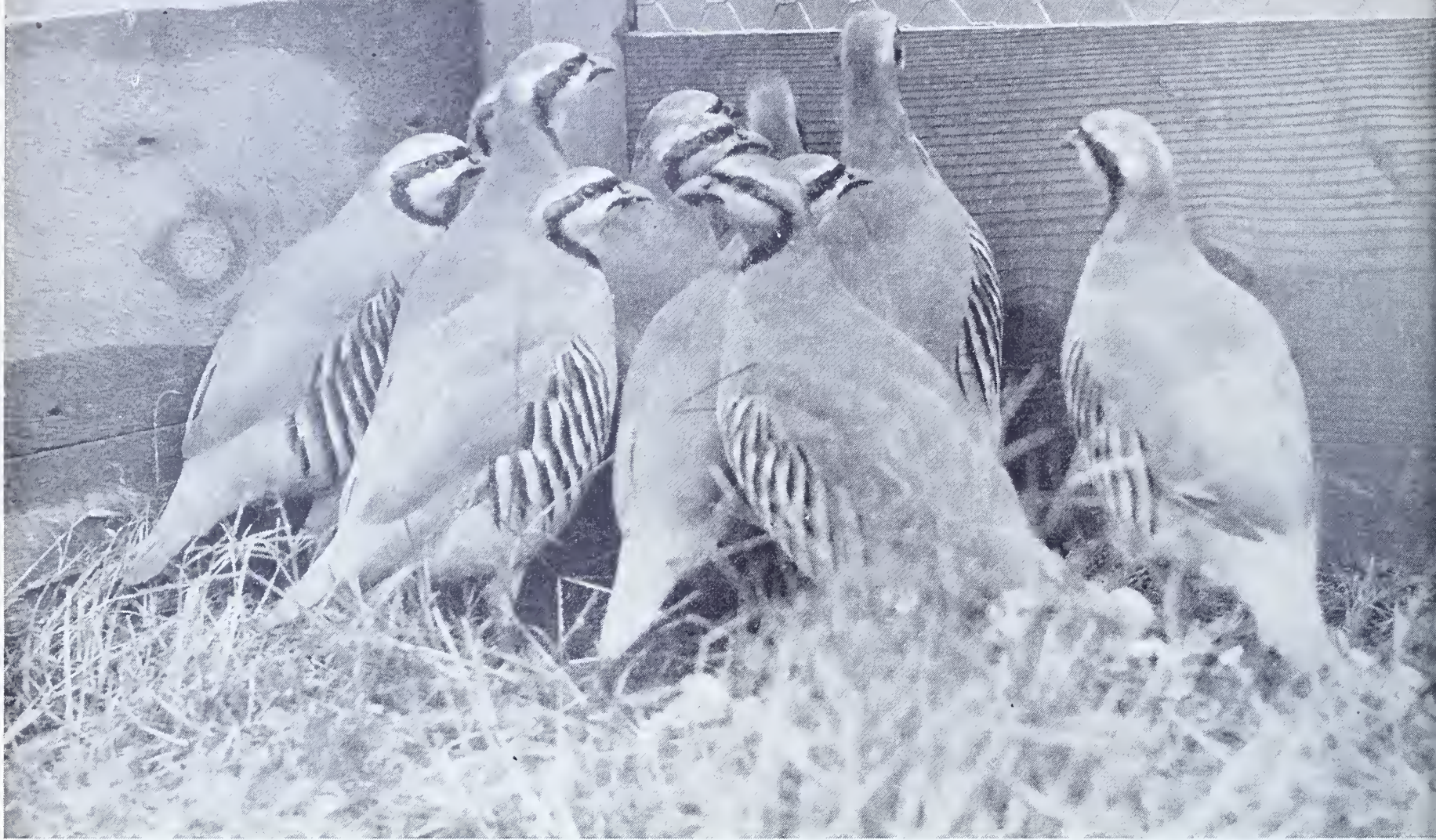
Adequate food produces large bucks with well-formed antlers.



The result of a food shortage for deer—lighter bucks carrying stunted antlers.

Introduction of Exotic Species

by Albert M. Day



THE VERY thought of introducing to our shores new and untried forms of wildlife always raises sincere protests from many quarters. Many biologists feel that no bird or mammal should ever be brought into a range that was not originally inhabited by the same species. Some would confine transplants and reintroductions to those areas where the same subspecies were previously found. On the other hand, there are many enthusiastic sportsmen who would see exotics introduced and heavily stocked any time the indigenous forms have been seriously reduced in numbers, whether from loss of environment or from excessive hunting.

Advocates of both schools of thought can point to specific examples and instances to prove their points. That is possible because there is some merit in each contention. This fact again reminds me that this is one of those topics that can easily become explosive. Let me make this point clear at the outset: I feel that we need more information than we are now gathering on this question of introducing new and untried forms of game birds and mammals, and I hope that this paper may help to crystalize interest to the point that we may initiate a plan for obtaining that knowledge.

The record of foreign species introduced into our native environment is mixed. There have been some sad experiences, and there have been some notable successes. In almost every instance to date, the success or failure of the attempts have been pretty much a matter of chance. Little advance thought or research went into the undertakings. Perhaps that is why the record stands as it does today.

* An address presented by Mr. Day, Director, U. S. Fish & Wildlife Service, at the 38th Annual Meeting of the International Association of Game, Fish, and Conservation Commissioners last September at Atlantic City.

Yet the bringing in of some exotics in the past has had great influence on the conservation program as we know it today. Few people realize it, but the lowly English sparrow might well be credited with laying the egg that brought forth the Biological Survey, one of the parent agencies of the present Fish and Wildlife Service. These little birds, shipped to this country in the '50's from Europe through the efforts of a few enthusiastic sponsors, soon responded to the point that they spread over much of New England. Their aggressiveness began to demonstrate itself when they grew so numerous that they crowded out the native song birds bringing on themselves the wrath and ire of ornithologists and bird lovers alike. The resulting controversy aroused enough interest that Congress was induced to appropriate \$5000 in the Agricultural Appropriation Act of 1885, one of the purposes of which was to assist in the study of the English sparrow pest. The first bulletin published by the unit that later became the Bureau of Biological Survey was entitled "The English Sparrow (*Passer domesticus*) in North America, Especially in its Relations to Agriculture," and was written by Walter B. Barrows. It was published in 1889 as Bulletin No. 1 of the Division of Economic Ornithology and Mammalogy of the Department of Agriculture.

Resistance to the well-intentioned urge to bring in exotic forms of birds and animals some 50 years ago also led to the passage of the Lacey Act in 1900. While it gave strong added protection to native forms, it had as one of its principal provisions the regulation of the introduction of all exotics. It prohibited by law the importation of a few species then known to be injurious to American wildlife or agriculture.

Probably more popular than the noisy and piggish little English sparrow is the European starling. These birds have increased and spread at an alarming rate, and have now pushed across country from the Atlantic coast into the far west. While they undoubtedly

devour many insects, even including the obnoxious Japanese beetle, I doubt that there is any bird quite so unpopular, particularly with Washington hotel owners who find that their buildings seem to exactly suit the roosting needs of the swarming hordes of starlings every winter.

Many other expensive mistakes in bringing exotic forms into a new environment can be found. The well known case of the European rabbit stocked in Australia many years ago, is an outstanding example of the unwise introduction of a species that demonstrated unusual response to new environment. It is still a major pest in Australia. The Eastern (American) gray squirrel was stocked in Britain, and changed its habits by developing into a bark eater. It proved to be a great pest by girdling and killing trees. The muskrat, when introduced on the European continent, became a costly nuisance by burrowing into the banks of dykes and canals. Great effort has been made to keep them out of California's irrigation systems for the same reason. Deer introduced into New Zealand turned into agricultural pests, even as they are locally considered as nuisances in some fruit growing sections of the United States. The mongoose is a vicious example of what not to introduce into a new territory. In Puerto Rico, the Virgin Islands, Hawaii, and many other tropical islands, they were liberated to control rats and snakes. They paid little attention to the rats, but cleaned out the snakes and most of the ground-nesting birds on many of the islands. They are also troublesome pests about poultry houses. The German carp is another exotic brought in from the Old World to improve our fauna. This species has been a sad disappointment, to say the least.

These are a few of the sorry results, but the record is by no means as one-sided as this recital might indicate. The Chinese pheasant is the outstanding example of an exotic that has almost become a naturalized citizen. It is held in high esteem by thousands of hunters. It is one form that took a liking to our environment the same as did the English sparrow and the starling. Pheasants provide the bulk of the upland shooting in about half of the states in which they thrive—roughly across the country north of the Mason and Dixon Line. They have never accepted the South as suitable for their requirements.

Pheasants can hardly be said to be competitive with the native species. There is some evidence that locally they may interfere with grouse and other ground-nesting birds, but when one views the over-all picture, pheasants have probably been responsible in large measure for the preservation of some forms of upland game. The original prairie areas extending from Illinois to the Rocky Mountains, and northward to Canada, were once the home of large numbers of sharptail and pinnated grouse, plover, curlews, ducks, and geese. With the coming of the plow, the prairie grasses gave way to fields of corn and other grains, and wildlife habitat disappeared. Nebraska and the Dakotas still maintain fair numbers of both species of grouse, with scattered populations elsewhere in the Lake States area. With modern hunting pressure, I doubt that there would be many grouse left if the pheasants had not siphoned off the bulk of upland bird shooting there during the past 20 years. Confirmed grouse shooters now are in the



R. D. FARIAMAN PHOTO.
The Eastern gray squirrel when stocked in Britain, changed its habits by developing into a bark eater.

small minority, and the bulk of these are among the older hunters who learned the sport of grouse hunting in their youth. The younger generation now are quite happy to concentrate on ringnecks.

The Hungarian partridge is another exotic that has established itself quite well in some of the prairie sections of Canada, and to a limited extent in a few of the northern tier of Prairie States. To date, the Chukor partridge has been somewhat of a disappointment, but may still adapt its living requirements to some sections of the country. They are doing quite well in southern Nevada, and seem to be holding their own in California and Washington, after failing to take hold in many other States where they have been planted in years past.

The European wild boar has gained prominence in the mountains of Tennessee. Brought in by a wealthy sportsman to be held in captivity, the stock accidentally became liberated years ago, and now supplies the Tennessee mountain country with a new and exciting hunting stock. In Alaska, a herd of 500 buffaloes has developed from 23 animals originally shipped from Montana in 1928. In recent years, they have become something of a nuisance about the open grounds of the Delta airport which was established in the heart of their adopted range during the war. They soon forsook the wooded areas along the Delta River to frequent the airport grounds which seemed to remind them of the open plains of Montana.

Reindeer were brought into northern and western Alaska from their native Lapland in 1892. So long as they were herded and protected by the Laplanders who came over with them, these near-relatives of the caribou did remarkably well. In fact, the herds grew from 1200 in 1892 to an estimated 600,000 a few years

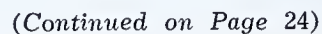
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In Alaska a herd of 500 buffaloes has developed from 23 animals originally shipped from Montana in 1928.

By ROBERT D. PARLAMAN

Outstanding on the area is Brady's Lake, 180 acres in size and oft-times mentioned on maps as Trout Lake. The upper lake was formerly built to float logs to the saw mills at White Haven. Later years found the Brady interests constructing a lower lake to increase the annual ice harvest. A railroad spur from the lake front connected with the main line of the Wilkes-Barre and Eastern Railroad to haul the ice to the big city markets. One large body of water now exists.





OUTDOOR KIDS

By HAL HARRISON

"IT just HAS to be somewhere along this bank, Billy," insisted Jane as she and her brother continued their search for the nest of a Louisiana Water-thrush among the tangled roots and mosses of a high bank along a woodland stream.

"Pop told us it was here," she added.

"Yea, he told us it was here, all right," Billy answered, "but he didn't tell us EXACTLY where it was. This is like looking for a needle in a haystack. There are a million places to hide that nest along this bank," he declared as he peered under some overhanging ferns.

A loud metallic chip, repeated excitedly, came from a little brown bird with a streaked breast and a white line over its eye. As it walked quickly from one wet rock to another along the edge of the creek, it bobbed up and down like a sandpiper. Suddenly, from a low branch of a maple tree, the male uttered his wild, rapid song. It started with three slurred notes and ended in a merry jumble of discords.

"We must be getting pretty warm, Jane," Billy cried. "Look how excited the old birds are now. I'll bet the nest is right around here."

The words were hardly out of his mouth when he shouted:

"Jane! Jane! Here it is. I've found it. Boy, oh boy, what a hiding place! Just look at this."

His sister ran to join him and together they marvelled as Billy pulled aside the ferns that hid the entrance completely. The grassy cup-shaped nest was elevated on a platform of damp leaves, well-concealed in a hole in the clay bank.

(Continued on Page 28)

THE PANTHER ON TERRACE MOUNTAIN

By COLONEL HENRY W. SHOEMAKER

VISITORS to Juniata College, alma mater of Governors and patriots, after wandering over its superb upland campus far above the blue waters of the Juniata and the city of Huntingdon, have noticed lying off to the southeast the giant outlines of the Terrace Mountain. This isolated ridge commands respect by its appalling size, rising defiantly against the horizon. A titan in a family of mountain monarchs. Once seen, the im-



pression persists through the years, its image is as clear cut as the pyramids of Egypt.

When the first settlers penetrated the Juniata country they were deeply awed by Terrace Mountain, not only by its size and grandeur, but by numbers of fierce beasts which it harbored in its trackless forest covers. There were seemingly all kinds, a Noah's ark of diversity, all the way from the moose, the bison, the panther or Pennsylvania lion, the grey wolf, the bay lynx, down to the flying squirrel and the chipmunk.

Of these the most characteristically American was *Felis Cougar*, that huge cat-like animal called by the first settlers the panther or "painter." The American prototype of the lion, it had all the ferocity of the African and Asiatic king of beasts. In size it was little inferior to the biggest African lions, panthers having been killed in Pennsylvania which measured over 9 feet "from tip to tip." In bravery it ranked second to none, always defending its young to the last extremity, and charging its hunters when wounded. But there is practically no authentic record of a Pennsylvania lion or panther having attacked a human being without first being provoked. Its infernal nighttime roar, though set in higher key than the thundering of the lion of the Atlas so vividly described by the Spahi, Jules Gerald, is not the less impressive. It preyed on weak or sickly deer or elk, weeded out the old and infirm animals, thereby preventing the spread of pestilences and keeping the deer family at times virile and active.

When the panthers were destroyed the deer deteriorated just as the buffaloes, elands, and antelopes in Portuguese East Africa succumbed to the rinderpest after the destruction of the lions. In sagacity it ranked far above all other American animals except the wolf; it possessed an uncanny intelligence. As a picturesque feature of Pennsylvania mountain life it created a host of romances, it was a pre-eminent source of mystery and wonder. In point of prevalence in the early settler days it was almost as numerous as the wolf, with which it sometimes fought for the supremacy of the forests. Bill Perry killed a panther in Centre County in 1870, the head of which was scarred from frequent battles. Trapped and hunted at all seasons of the year, the Pennsylvania lion maintained a brave fight for existence, and though now classed with the extinct animals of the State, there are at least a hundred reputable mountaineers who will tell of having heard or seen panthers within our borders during the past five years. The last to be killed were a nest of cubs taken by "Clem" Herlacher in Treaster Valley, Mifflin County, in the spring of 1893.

There were two races of panthers in the State: those which maintained a fixed abode in some ravine or valley, and those which wandered from county to county, or from West Virginia to Northern Pennsylvania.

Those having a fixed abode were quickest exterminated—as a general thing—but there were panthers on Rock Run longer than in any other part of the State, except in Treaster Valley. John McGowan, a track-walker, saw a panther sunning itself on a flat rock near the mouth of Rock Run in 1910. Panthers in considerable numbers lingered long on Rock Run, and in the entire Beech Creek region for that matter. Though possibly not extinct in this State, they have not bred here since Herlacher broke up the last "nests" in Treaster Valley in 1892 and 1893. Usually four cubs were born early in April, but sometimes there were as many as six at birth; the rutting season in Pennsylvania occurred at Christmas time.





There was a great diversity in appearance among the lions of Pennsylvania; some were very dark, others almost red, but the prevailing color was a slaty gray, with orange or fulvus tinges about the ears, throat and belly. The males outnumbered the females by about five to one. The tails were thick and long, with a tuft of hair almost as profuse as on the tip of an African lion's tail. On various occasions panthers with manes were taken; one of the last of such was killed in the Bald Eagle Mountains by the celebrated frontiersman, Peter Pentz, in 1797.

Many and curious were the legends clustered about these savage beasts, especially in the Great Terrace country where they were so numerous that the first settlers thought it nothing remarkable to kill eight to ten in a winter.

Jake Faddy, the old Indian story teller, was spending a night at a farmhouse on Little Trough Creek when one of the last panthers killed on the Terrace Mountain was brought in. It was a half-grown animal, about five feet long, but its capture in a bear trap created no end of excitement, making heroes out of its two youthful slayers, the McConnel boys. The grandfather of the young Nimrods, old Joseph McConnel, had many stirring panther stories to relate that evening, but it remained for the Indian guest, Jake Faddy, to unfold the most remarkable anecdote.

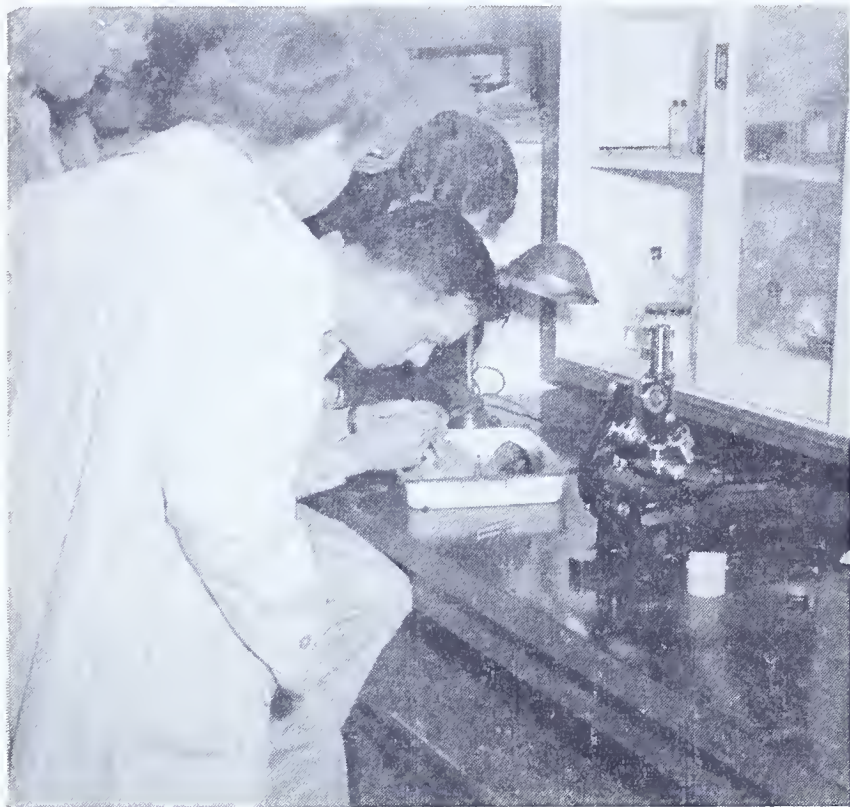
When old McConnel was a young man he had hunted panthers every winter for the bounties. It was wonderful sport, even when the county became so flooded with bounty applications that it stopped payment for a time, and the fur dealers ceased buying the hides, they had so many. Panther hides were shipped by the bale to Germany, which now strangely enough is the principal market for the pelts of African lions. One year McConnel killed so many panthers that he covered the four sides of his father's barn with the hides. As there was no market for them, they hung there until they were blown down by the winds. It was no uncommon thing in those days to hear four

or five panthers roaring on the Terrace Mountain in a single night. First one to the south would begin, then a second a mile away would take it up, passing the wierd call on to a fourth a mile further on, or a fifth, until the whole mountain would reverberate with the savage love notes. When the cry would be heard up on the mountain back of the farmhouse McConnel would get his dogs and start a chase which would last until daylight. Sometimes the panther would corner the dogs in a hole in the rocks, and leave them bleeding and dying before the hunter could reach the spot. A light tracking snow was the best time to hunt the brutes, when they could be followed to their caves on ledges, or under overhanging rocks, and shot before they hurt the dogs. But many of them got into bear or wolf traps, which were scattered all over the mountains. That was an inglorious end for Pennsylvania's king of beasts, as the hunters usually beat the snarling monsters to death with the butts of their rifles. Sometimes the traps were not visited regularly and the victims succumbed to starvation or exposure.

When the veteran hunter had finished, old Jake Faddy began his narrative. He told of hunting panthers in Indian days. Then the exciting sport was carried on with long oaken or hickory stakes, sharpened at the ends like spears. The panther not being associated with any clan name and being

an enemy of the wolf, was hunted more persistently than other animals. Its hide was used for many purposes, ceremonial and domestic. The "great medicine" was always kept in a pouch made from it. Its meat was relished even above the flesh of the bison. Its blood gave courage to warriors, when drunk fresh. Its claws hung around the neck by a cord were amulets of good luck. Its teeth were much prized as decorations. Shoes fashioned from its paw made young Indians grow tall and strong. Its tongue was the favorite tid-bit for banquets of the chiefs. A decoction made from its eyes prolonged life. Its bones made excellent cutlery. The tuft of its tail made a warrior's war plume. None of it was wasted; all of it was much desired. Despite the fact that it was systematically hunted, there was no intention to exterminate it; the Indians were too sensible for that. It had too many valuable attributes for such a short-sighted procedure.

The hunting was generally done in the fall and early winter, when the animals were fattest and the hides in prime condition. Once in a while reports were brought to the camps of panthers attacking human beings, especially children. Many braves were followed at night over hill and dale, with the tawny monsters uttering their mournful cries, but always keeping at a respectful distance in the rear.



Observation is essential to learning.

THE signs of the times are clear. Ruthless destruction of game in fields and forests has abated. Pollution of streams declines. Sunsets become more and more beautiful as smoke elimination programs are everywhere expanding. An awakened moral consciousness is definitely developing.

Conservation programs, encouraged and stimulated by lay and professional groups, have aided in this development. To this end, a significant contribution has been made in the field of teacher education. Teachers are increasingly accepting the basic principle inherent in the program for Conservation education. This basic principle states that each generation must leave a heritage rich in natural resources—streams, forests, soil, minerals, game, fish and flowers; not less, but greater in their extent to contribute to the fullness and richness of life.

The schools have accepted the challenge. A revitalized program of Conservation education is in the making. Teachers are better informed. They take more field trips. Visual aids and informative literature supplement instructional service. Conservation practices learned from first-hand experience are taken into the classroom. Colleges and Universities give renewed emphasis to the education of teachers in Conservation; as a consequence, the instructional programs of the elementary schools have been influenced by the leadership which such teachers exert. The next generation is now taught by informed and inspiring teachers and the character of the citizens of tomorrow will reflect the program of today.

Pollution of streams, destruction of fish and game, laying waste of forest tracts are not just thoughtless activities. Such acts reflect deficiencies in our educational programs. Where public schools develop right attitudes on the part of the pupils (men and women of tomorrow) toward the problems involved in Conservation education, the basic deficiency is remedied. Adequately prepared teachers in this field can save mineral resources, forest lands, game and fish; they will develop that type of American character which senses its responsibilities to each succeeding generation. The teacher who lights the torch of moral consciousness influences the destiny of civilization.

The Fourth Conservation Education Laboratory for Teachers is a continuation of the effort to revitalize the education of teachers in this field. The First Laboratory was established as an experiment. Lay organizations throughout the Commonwealth generously supported the project. State Departments contributed funds and instructional services. Teachers gave of their time to participate. So fruitful was the first Summer Session that the State-wide sponsoring group agreed to develop a Second Laboratory, then a Third, and now a Fourth Session.

AN AWAKENED MORAL CONSCIOUSNESS

By HENRY KLONOWER

Executive Director, State Advisory Committee

The Pennsylvania Conservation Education
Laboratory for Teachers

The Laboratory will be conducted at the Pennsylvania State College, State College, Pennsylvania, through two three-weeks Summer Sessions extending from June 27 to July 16 and from July 18 to August 6, 1949. The Laboratory will be similar to the programs followed during the conduct of the First, Second, and Third Laboratories and will emphasize teacher education as it applies to the Conservation program. Scholarships will be made available through the generous support of professional and lay organizations. Certain educational foundations will provide, in part, financial support. Each teacher who is enrolled must be recommended by the superintendent of the district in which he or she is teaching. Application blanks for scholarships are available through the Executive Director. Since present plans contemplate a limited enrollment of thirty-five teachers in each Session of the Laboratory, it is possible that scholarships will be available to those who are recommended by the Scholarship Committee for admission to the Laboratory. Scholarships will cover instructional fees, room and board, laboratory fees, and transportation on field trips.

Numerous organizations have co-operated in the establishment of the Pennsylvania Conservation Education Laboratory for Teachers. These organizations through a joint advisory committee of which Mrs. J. Charles Runk, Pittsburgh, Pennsylvania, is chairman are co-operating with the College by providing consultants,

(Continued on Page 32)



One learns through experience.

A WATERFOWL PROGRAM FOR THE ATLANTIC FLYWAY



Basic Objective

Maintenance of the largest possible shootable surplus of waterfowl in the Atlantic Flyway.

Introductory Statement

Attainment of a sound program of action to benefit waterfowl using the Atlantic Flyway requires the closest possible coordination of the activities of all federal, state and private agencies concerned; the most effective use possible of the comparatively limited technical personnel available, free exchange of information and increased public effort and understanding.

It is obviously impossible to chart a permanent course of action, listing in detail all the steps which will have to be taken. The question is what to do first and why. This has been studied by a group of waterfowl biologists through the Northeastern Region Waterfowl Committee and the Joint Black Duck Committee, an unofficial advisory body composed of representatives of the Wildlife Management Institute, the Fish and Wildlife Service, Ducks Unlimited and some of the States.

There could be many suggestions offered, all with varying degrees of merit. A proposal in such form, however, would in itself defeat the mutual objective for it spreads inefficiently limited personnel rather than concentrating forces on important points.

With that in mind, the following outline of basic steps is submitted for the simple

purpose of setting forth clearly common goals and in the earnest hope that coordinated action will speed brighter days for Atlantic Flyway wildfowling.

Suggested Procedure

1. Correlation of all existing information from past banding and field studies for the purpose of ascertaining what further studies are needed and to learn what limiting factors for Atlantic Flyway waterfowl must be overcome.

2. Stimulation of new banding studies and field work as their need is pointed out.

3. Establishment of uniform methods for conducting waterfowl censuses and gathering kill data throughout the flyway.

In view of the lack at this time of positive information on the most critical limiting factors which will in themselves determine the work to be emphasized in the future, the following management suggestions pertaining to three potentially critical periods are listed without regard to relative importance:

4. Establishment of a more adequate system of managed areas to be operated as refuges or shooting grounds.

5. Encouragement of small marsh restoration programs in breeding territories and improvement of wintering grounds.

6. Supplementing waterfowl populations in suitable habitat by *regulated* releases of artificially propagated stock.

Responsibilities

Fish and Wildlife Service:

1. To correlate and interpret existing information and new information as acquired.
2. To disseminate the findings to the various cooperating agencies.

3. To devise a uniform method for determining the waterfowl kill.

4. To point out where waterfowl management areas are needed in the flyway.

5. To develop a basic policy to govern the rearing and releasing of artificially propagated waterfowl.

6. To supply an adequate central office and field personnel to carry out these responsibilities. (It has been suggested that a central office coordinator and assistant and two flyway biologists in the field—one in the Northeast and one in the Southeast are necessary immediately.)

Wildlife Management Institute:

1. To coordinate the States and other agencies in the use of uniform methods in making censuses and securing other necessary information.

2. To undertake field studies where feasible.

3. To promote the undertaking of suggested management practices.

4. To promote public understanding of the objectives and accomplishments of the waterfowl program.

(Continued on Page 32)

STRIP-MINED AREAS CA

By FRAN



USCS Photo.

Multiflora rose living fence planted on lower part of mine spoil, next to pasture on Smail farm near Corsica.

NO ONE, not even the strippers themselves, are very happy about the waste areas that remain after taking out coal by surface mining—commonly called *strip mining*. But bemoaning the condition isn't going to help it for there seems to be no alternative so long as we want coal and there are valuable seams near the surface.

The practical problem then is what to do with the mess once the coal is out. Pennsylvania has taken the leadership in working out the legal side of this problem. Act of the General Assembly No. 418 approved May 31, 1945, and known as the "Bituminous Coal Open Pit Mining Conservation Act," sets forth clearly the responsibility of the miner. What's more, the law has real teeth in it and has been upheld by the courts, so there is every reason to believe that it will be enforced.

In a nutshell, the operator is required to backfill his last cut so as to cover the coal seam, "level" the spoil banks or "monkey mountains" to a degree that satisfies the State Department of Mines, and to revegetate the mined area to the satisfaction of the State Department of Forests and Waters.

It is the latter consideration, the revegetation, that concerns us at the moment, for these areas are potentially valuable wildlife habitat. It is true that most of these spoil areas are among the most difficult planting or seeding sites that we have to deal with. But it is also true that almost all of it can be reclothed with plants quickly, even though nature often takes many decades to do it if left to her own devices. A judicious choice of the plants to use, and their arrangement, will provide vastly better wildlife cover than would result if wildlife needs were not considered.

The first decision that must be made in planning for revegetation is the land use to which the area will be put. This is a matter to be decided by the landowner, but if the decision is to be a wise one it must be put to a use that is consistent with its soil capability. A few—a *very* few—of these mined lands can profitably be returned to croplands in Pennsylvania. These few are the places where the majority of the spoil

is of a limestone rock derivation that can be re-adapted to growing crops. Some of these limestone areas that are not good enough for crops may be adequate for developing into grassland and used as pasture. In both of these instances the amount of land leveling required is considerable and can only be justified where the soil material is *really* of a high quality suited to agricultural use.

The vast majority of mine spoil areas in Pennsylvania, either bituminous or anthracite, are too poor in soil material and too acid to return to farming. They are only suited for developing into forest and wildlife areas. It is these places that I want to talk about and suggest ways of planting them so as to obtain really good game cover as well as woodland.

Three types of woody plants are needed for these plantings and there are species of all three types that are suitable. They are: coniferous trees, hardwood trees, and shrubs. Both experimental plots and field planting

experience of the State Department of Forests and Waters, the Pennsylvania State College, and the U. S. Soil Conservation Service have provided us with ample plants to do the job well.

In addition to the plantings there is one other matter of considerable importance to wildlife on these areas. It is *water*. The final cut of a stripping operation frequently offers a good opportunity for impounding water. If the coal seam is well sealed by the back-filling and the ends of the cut are closed, the resulting body of water may prove of great value to both aquatic and other kinds of wildlife.

As a general thing, the more these four kinds of cover—conifer woods, hardwood forest, shrubby cover, and water—are interspersed in their arrangement, the more *edges* there are between them and the better the resulting wildlife cover. However, a kaleidoscopic jumbling of the plantings and water impoundments is not either good or practical. Each cover type has to have a size that is significant. Hence we need some pattern to follow in our development plan. First to dispose of, by necessity, is the water area, if any. Ponds must go where they can be made easily and cheaply, and preferably before the stripping machinery has left the job. With the water areas settled, our choices rest with the plantings.

Because of the nature of shrub, or brushy cover—its low height, need for direct sunlight for full fruiting, and the importance of easy accessibility for maintenance cuttings—it should be developed along the edges of the area. These edge plantings of shrubs, which have been termed *shrub borders* or *wildlife borders*, can be made along the margins of the spoil area with farm fields, along water borders, or along the sides of roads



USCS Photo.

Mine spoil on Quay Lerch farm at Clarion showing area just after seeding to bi-color lespediza.

MAKE WILDLIFE COVER

MINSTER

that cross the area. These border plantings should be at least 20 feet wide, usually not much more than 30 feet.

The rest of the area is best devoted to trees. The hardwoods should go on the best soils, that is, the least acid ones, and conifers on the rest. The tree species suitable for use in spoil plantings will differ some by areas and soil conditions. For most of Pennsylvania, the best conifers to use are the pines. Best ones are scotch, red, white, pitch, shortleaf, and virginia pines. The larch is the one other conifer that can be generally recommended for these plantings.

Hardwood trees are usually not suitable for these plantings but the black locust is an exception. On the better sites it will develop into fence post material and thus provide some economic return. On poor places it will grow for a few years and then usually succumb to canker or some other form of ill health. But it has still served a valuable purpose. It makes it possible to get some quick cover and to make way for nature to establish a variety of other plants to take its place. The poplars and the ailanthus can also be used in hardwood plantings on spoil just to get a quick plant cover. All of these hardwoods will make a variety of wildlife cover which will have some value, even if most of them will not develop a commercial wood crop.

Less is known about shrubs that will grow on mine spoil than about trees. However, a number of plantings made by the Soil Conservation Service in Clarion and Indiana Counties in the past five years have demonstrated great promise for several species. While most of the varieties of shrubs tried



USCS Photo.

Three year old sand cherry plants on mine spoil, already producing a crop of fruit.

were utter failures, three kinds gave good results and two more showed some promise of success. The best shrubs were multiflora rose, sand cherry (scientific name: *Prunus besseyi*), and bicolor lespedeza. The two with some promise but requiring further tests and observations were autumnaleagnus (*Elaeagnus umbellata*) and tatarian honeysuckle (*Lonicera tatarica*). Multiflora grows rapidly, will spread to cover adjacent bare ground (but not into vegetated land), and will develop a living fence if needed for a pasture boundary. Its thorny, entwined branches make fine wildlife cover and its fruits have food value for some wildlife too. Plantings of seedlings should be in rows with three foot spacing, unless a fence is wanted, in which case the space between plants is only one foot.

The sand cherry is a small plant, growing only three or four feet high. It does not

spread readily, hence should be planted close together, about two feet apart, to get a good cover. It is a very attractive shrub and is surprisingly vigorous on these poor sites. The large cherries start coming after only three or four years and are fine for making preserves as well as for wildlife food.

Bicolor lespedeza can be established by either seeding or planting. Seed should be scarified and planted in fall or very early spring. Fertilizer and lime will aid its development. Rate of seeding is ten pounds per acre broadcast. Seedlings are spaced three feet apart. Seeds of this lespedeza are fine food for quail and pheasants. Rabbits feed on its leaves and twigs. Its late summer flowers provide excellent nectar for honey making. For these reasons this plant is coming into wide favor for farm and wildlife plantings. Its zone of use runs north only to central Pennsylvania although strains are now being developed that are expected to be suitable for use throughout Pennsylvania.

By developing these shrubs in border strips around and through the tree plantings, a variety of cover will develop and some food supply with it. Water areas and the fall spots in the plantings will provide openings. All together they can make very desirable wildlife habitat out of presently barren wastes.

An elephant's trunk contains 40,000 muscles and can perform more services than any other animal part except the human hand.

* * *

There are 20,000 living species of fish.

* * *

The sting of a bee is located at the tail-end of the abdomen.

* * *

The hum of a bee is due to the very rapid vibration of the bee's wings.

* * *

The humps on the camel are masses of fat serving as a reserve store of food. With hard work or bad feeding, the hump dwindles almost to nothing.



USCS Photo.

Mine spoil on Quay Lerch farm at Clarion showing area three years later with good cover developed.



Karl Maslowski Photo.

Immature red-tailed hawk.

THE RED-TAILED HAWK IN PENNSYLVANIA

By ROBERT D. McDOWELL

(Editor's Note: This article renews a series on food habits of our native hawks and owls which was started in GAME NEWS prior to the war. Mr. McDowell, present Chief of the Commission's Research and Planning Division, previously has written similar studies on the great-horned owl, goshawk, and Cooper's hawk.)

From 1924 to 1947 Sutton, Luttringer, Langenbach, Latham, and the writer conducted intermittent food habit analyses of the winged predators.

Although the exact location of take of all the Red-tailed Hawks examined is not known, Figure 1 shows the counties in which 342 specimens were collected.

Because two different systems of recording the stomach contents were employed it is impossible to combine the findings of all the analysts into one report. Figure 2 rep-

resents the combined analyses of Langenbach, Latham, and the writer. Their system was to record the occurrence of each individual of each food species (except in the case of insects). Sutton and Luttringer recorded only the appearance of each prey species found in each stomach. Their combined findings are tabulated in Figure 3.

An examination of these two diet charts indicates that the Pennsylvania Game Commission is justified in declaring the Red-tailed Hawk a protected bird in Pennsylvania.

FIGURE 1

Distribution Record of 383 Red-tailed Hawks

County	Number	County	Number
Adams	4	Juniata	3
Allegheny	4	Lackawanna	4
Armstrong	0	Lancaster	16
Beaver	2	Lawrence	1
Bedford	11	Lebanon	3
Berks	10	Lehigh	14
Blair	1	Luzerne	8
Bradford	4	Lycoming	4
Bucks	10	McKean	1
Butler	1	Mercer	2
Cambria	0	Mifflin	1
Cameron	0	Monroe	2
Carbon	0	Montgomery	8
Centre	23	Montour	2
Chester	5	Northampton	6
Clarion	2	Northumberland	7
Clearfield	3	Perry	6
Clinton	4	Philadelphia	4
Columbia	4	Pike	5
Crawford	5	Potter	3
Cumberland	33	Schuylkill	4
Dauphin	7	Snyder	2
Delaware	6	Somerset	5
Elk	0	Sullivan	3
Erie	4	Susquehanna	3
Fayette	3	Tioga	6
Forest	1	Union	1
Franklin	30	Venango	1
Fulton	49	Warren	4
Greene	1	Washington	2
Huntingdon	5	Wayne	1
Indiana	1	Westmoreland	5
Jefferson	2	Wyoming	3
		York	8

FIGURE 2

Diet Chart of 199 Red-tailed Hawks

Food	Occurrence	Percentage
Mice	164	46.99
Insects	45	12.89
Shrews	29	8.31
Cottontail Rabbit	18	5.16
Poultry	18	5.16
Unidentified Birds	14	4.01
Snakes	9	2.58
Grey Squirrel	7	2.00
Chipmunk	6	1.71
Passerine Birds	6	1.71
Rats	5	1.43
Red Squirrel	4	1.15
Moles	4	1.15
Bobwhite Quail	4	1.15
Ruffed Grouse	3	0.86
Ringneck Pheasant	3	0.86
Crow	2	0.57
Frogs	2	0.57
Skunk	1	0.29
Woodchuck	1	0.29
Unidentified Mammal	1	0.29
Salamander	1	0.29
Crayfish	1	0.29
Red Fox (carion)	1	0.29
Total	349	100.00

FIGURE 3

Diet Chart of 255 Red-tailed Hawks

Food	Occurrence	Percentage
Mice	72	31.72
Red Squirrel	24	10.58
Poultry	18	7.93
Insects	17	7.49
Cottontail Rabbit	16	7.05
Unidentified Mammals	13	5.73
Grey Squirrel	12	5.29
Snakes	11	4.85
Unidentified Birds	8	3.52
Passerine Birds	7	3.08
Shrews	5	2.20
Ringneck Pheasant	4	1.76
Ruffed Grouse	4	1.76
Chipmunk	4	1.76
Frogs	4	1.76
Bobwhite Quail	2	0.88
Raccoon	2	0.88
Skunk	1	0.44
Rat	1	0.44
Mole	1	0.44
Crayfish	1	0.44
Total	227	100.00

Crows are Sport

by Hal Harrison



HUNTING "OLD CORVUS" BECOMES AN ART AND A SCIENCE AS RECORD NUMBERS OF HUNTERS TAKE UP THIS WORTHY OFF-SEASON SPORT

CROW hunting has reached the proportions of a major sport in Pennsylvania.

Throughout the state, thousands of nimrods have taken up this year 'round pursuit, and loyal devotees claim that nothing can equal it in the field of hunting game. There are no seasons, no bag limits and no other sport offers more of a test of the hunter's skill than outsmarting crows to bring them within shotgun range. Finally, the crow hunters are all firmly convinced that their sport also makes a substantial contribution to the economic welfare of the countryside; that crows are a serious menace to the farmer and to other birds.

Hunters who have enjoyed the sport during the past few years claim that they can now detect a definite decline in the crow population in many areas where they were once abundant. Indeed, some of the more rabid hunters are advocating a bag limit on "Old Corvus" to make very sure that they do not shoot their sport right out from under them. No hunter should be permitted more than 10 crows a day, they claim.

It takes a very smart crow hunter to bag 10 a day, however.

And over the last long Memorial Day week-end, I was with some very smart hunters to whom crow shooting is an art and a science. To these men, it is a test of skill, a matching of wits with the big black bird, and to them the wholesale slaughter of the crow is not to be countenanced at all. While they decry his depredations, they admit and admire the crow's cunning. They go out to meet him on equal ground.

Nine men participated in the Memorial Day shoot in Crawford County with Meadville as headquarters for the event. They divided into three parties as follows:

Robert Lamberton, vice-president of the Pennsylvania Game Commission, and Dr. Marlin W. Heilman, prominent Tarentum surgeon, teamed up with District Game Protector George Keppler.

H. B. Higgins, president of the Pittsburgh Plate Glass Company, and Dan L. Hoffman, Pittsburgh representative of the Houghton Elevator Co., were led by Bill Jackson, Conneaut Lake fur dealer.

In the third party, led by Deputy Game Protector Chuck Marburger, were Harvey Shertz, Pittsburgh Plate Glass Co. engineer, and Ross Blair, publisher of the Pittsburgh Legal Journal.



Above: A nest of five baby crows just about ready to try their wings.

Left: Game Protector George Keppler places a live great-horned owl and two live crows as decoys for the flock.



During the day I spent with them, the three parties bagged over 100 crows. The best score was a four-hour bag of 37 crows made by Higgins, Hoffman and Jackson.

There are many methods of hunting crows. Hoffman, an expert caller, uses nothing but an assortment of crow calls, which, when in the hands of an experienced hunter, represent an entire crow language. Different calls are given for different circumstances, and the crows are completely fooled by their human imitators. Ross Blair is another who relies entirely upon skill as a caller.

George Keppler uses a live crow as a caller and a live great-horned owl as a decoy. He also resorts to imitation calls, but relies heavily upon his trained crow to call in its unfortunate wild brothers. The owl, age-old enemy of the crow, often serves well to hold the crows in the vicinity of the shooters after the calling is completed.

Practically all shooting is wing-shooting and here again the skill of the hunter is put to a severe test. In this regard, Bill Jackson is considered one of the best shotgun hunters in the state. A crow that gets within 50 yards of Jackson is not given a Chinamen's chance of ever joining the flock again.

Left: Keppler offers his owl "Open-the-door-Richard" a freshly-killed crow as a reward for successful decoying.



Top scoring team demonstrates how they did it. As Dan L. Hoffman does the crow calling, H. B. Higgins, left, and Bill Jackson, right, knock the birds out of the air.



Returning from a successful "stand" are, left to right, Harvey Sherts, Ross Blair and Chuck Marburger, loaded with crows.



With over 100 crows piled at their feet, the crow hunters call it a day. Left to right, H. B. Higgins, Robert Lamberton, Ross Blair, Harvey Sherts, Chuck Marburger, Dr. Marlin W. Heilman, Bill Jackson, Dan Hoffman and George Keppler.



A resident of Benton recently killed a cat on the highway near that town. The animal weighed 13½ pounds and had similar marking to those of a wildcat, even to the bobtail, but it was definitely a house cat gone wild. Rabbits appear to be getting into production early this year. A large doe trapped on February 14 gave birth to four young while being taken out for release.—Game Protector Mark L. Hagenbuch, Bloomsburg.

On February 15 a retired naval officer who lives in Edison told my father and me that a black bear had been seen walking around the planting grounds of the Burpee Seed Company near Doylestown, Bucks County. This is the first time I have ever heard of a wild bear so close to the city of Philadelphia, Doylestown being only about 23 miles from the city limits.—Martin Kaiser, Philadelphia.

On February 25 a large doe deer came into the Borough of Wind Gap, ran across a main highway filled with traffic and leaped through a large display window into a gas station and garage. Once inside the building, she made her way among the cars and workmen to a small rear window. She then leaped through this window and continued on into the woods. She did not seem to be seriously hurt although there were a few drops of blood and a little hair where she had smashed through the front window.—Game Protector Edward M. Borger, Stockertown.



Twenty-five turkeys were observed at a corn crib feeder in mid-March and at one of the feeders on Game Lands No. 13 I saw three turkeys, four Blue Jays, five crows, four gray squirrels, and two field mice. The feeder holds thirty-five baskets of corn and I have filled it twice this winter. Deer have been coming into the farmers' fields along the highways. Have counted as high as forty along Beach Glen road in about a five mile stretch. Deer are in very good shape in this district.—Game Protector Chester Siegel, Benton.

While clearing food plots on Game Lands No. 52, on February 17, we found a pussy willow that was budding. In the process of trying to clear up some of the old fields which are found scattered around this tract of Game Lands, we have found some with very excellent soil. Many years ago, when the burning of charcoal for the iron furnaces was the chief industry in this area, families lived all through these hills. In most instances these fields are found close to the ruins of the old homes and were probably the truck patches for these residents. After the old furnaces were abandoned and the source of their livelihood was lost, these people moved away. Civilization left the hills and they reverted to their former wooded state. Now the cycle is changing and with the coming of the turnpike through a portion of this area, a measure of civilization will return again. Motorists passing through on this super-highway, will never realize just how peaceful and serene this area was during the past decade.—Game Protector Joseph A. Leiendecker, Reading.

On February 19 in Harmony Township, Susquehanna County, I observed a woodcock which took flight upon being disturbed. There were several inches of snow still on the ground at the time. To my knowledge, I have never observed any of these migratory birds in this area in the dead of winter.—Game Protector Howard F. Hoffman, Susquehanna.

One of our local weasel trappers informed me that two of the weasels he caught this winter had some kind of worm around the front shoulders and neck. They were located just under the skin. I have never heard of such a condition in weasels before and it certainly gives rise to many questions.

One week early in February I received word that a farmer in Conneaut Township wanted to see me as soon as possible. It seems that the driver of an out-of-state car had stopped near his house, got out, walked along one of his fence rows, and had placed a red, cylindrical-shaped object about three inches long and about an inch and a quarter in diameter on one of the posts. The farmer was sure the object contained poison or, worse yet, some type of explosive. Would I please come out and determine what it was? Naturally, I was interested, contacted Deputy Greenlee, and, together, we went to the farmer's house. The farmer dropped his work immediately and we proceeded to the fence row and started to walking along it. As we got to the brow of a little hill, the farmer cautioned us to be careful as we were very close to IT. A little bit further on he stopped, pointed under a thornapple tree, and in a voice filled with suppressed excitement, said, "There IT is." I looked, Deputy Greenlee looked, and we looked at



each other, and found it difficult to keep a straight face. In dead seriousness we walked over and picked up a little red, wooden, broken-handled toy mallet. All the farmer could say was, "I'll be darned." This may sound like a practical joke on the Game Protector but I think not. This particular farmer was not the kind to play tricks and he was entirely too serious about the whole affair. What I do like was his practice of calling a Game Protector for help when things happen which he doesn't understand.—Game Protector C. W. Dinger, Albion.

In order to alleviate a damage complaint a male pheasant was live-trapped in this District in February, and later was banded and released three air miles from the trapping site. After ten days passed, the same pheasant was again live-trapped in this district at the identical place in which it was originally trapped ten days before.—Game Protector John M. Haverstick, Lancaster.



Dr. Schenck, a veterinarian in Butler, told me early in February that a man by the name of Waller who pumps oil wells near Graham Terrace was walking through the woods to one of the wells when he heard a screeching sound that sounded like a hawk. Upon looking up to see if he could locate it, something grabbed the man by the hand. Turning, Waller saw that it was a gray fox. He continued on along the trail but the fox again grabbed him by the hand, this time holding on. Waller grabbed the fox and slapped it up against a tree, killing it. Dr. Schenck believes the fox had rabies.—Game Protector George W. Miller, Evans City.

On February 4 I was called to the Summit Hotel to investigate a deer that had been found dead a short distance from the hotel's water supply reservoir. I was accompanied to the scene by the hotel engineer who had discovered the carcass while removing debris from one of the small streams that feed the reservoir. The animal had apparently been dead for three or four days and appeared to be normal in every respect except for a large rounded swelling on each side of the face. When a careful examination revealed no other wounds or injuries, I turned my attention to these swellings and was surprised to discover that they were hard. They resisted pressure instead of being soft and full of pus as I had first conjectured. With the assistance of the engineer, a cut was made in the external skin on both sides of the jaw and the swellings were revealed to be tightly-packed cuds of food about the size of a small grapefruit. They consisted of bits of leaves, twigs, seeds, grasses, and parts of acorns and other unidentified browse. The deer's teeth were apparently in good condition and these cuds of food were compressed between the closed teeth and the other skin of the jaws. The case is still unsolved although every conceivable theory from gluttony to lockjaw has been advanced by interested sportsmen in this area.—Game Protector T. W. Meehan, Uniontown.

The mild winter we have just enjoyed may have taken a serious toll in our first litters of wild rabbits. On three different occasions I have heard of litters of young rabbits being frozen. The earliest report of young rabbits was January 14.—Game Protector J. S. Kepner, Manchester.

During the 1948 open hunting season on woodcock, grouse and rabbits, numbers of hunters were interviewed. Some of these sportsmen were accompanied by dogs; others hunted without canine assistance. During the course of these talks the value of hunting dogs was proven beyond a shadow of a doubt.

Woodcock hunters, 27 in number, in 12 groups of from one to five persons reported bagging 41 birds. Dogs were used in each instance. No "timberdoodles" were lost; every bird which was known to have been hit was retrieved.

Thirty-nine grouse and rabbit hunters tried their luck. They bagged 12 rabbits and 10 grouse. Only those individuals or groups accompanied by a dog or dogs were successful. Seven parties without dogs failed to collect a single piece of game!

Increase your small game hunting bag and your sport. Take a dog along!—C. R. Studholme, Leader, Pittman-Robertson Project 25-R-2.

News reached me early in February that two hibernating bears were found by a pipeline walker in the Maple Creek section not far from the Hottellville school. I visited



the spot one morning with two sportsmen from Marienville and found that an old bear and a yearling cub were located under the side of a big flat rock. Both of them seemed wide awake. We took a cake of honey with us and placed it under the old bear's nose. At first she didn't want to eat it but after smelling it for awhile, she evidently decided it was too good to pass up. With one big bite she took half the cake; then acted like a dog when you feed it taffy. The wax seemed to get stuck in her mouth and she would make a lot of funny facial expressions before it was finally chewed up. I wanted my wife to see the bear and that afternoon we started to walk into the woods towards the scene. However, before going far, we encountered about a dozen people walking out from the den and by the time we reached it, we were just in time to see the old bear and the cub rambling down through the woods. I believe the large crowds of people who were coming in to see them caused too much excitement and they decided to find a more quiet place in which to finish their long winter sleep.—Game Protector Bill Overturf, Marienville.

Mr. H. L. Meachm of Summerdale was hunting fox on the evening of February 14 on Cove Mountain just this side of Dun-



cannon. While standing very still, he saw a gray fox which he shot. Upon picking it up, he discovered the animal was in the act of attempting to kill a copperhead snake. The snake had been bitten but was still alive. Meachm killed both but because he had to stand on tip toes to shoot, the recoil of the gun knocked him off-balance and he fell backward down over the rocks for a distance of about 15 feet. In the fall he hurt his back and knocked himself unconscious when his head struck the rocks. He lay there for some time before regaining consciousness. Finally, Meachm was able to finish off the snake and he later brought both the fox and the copperhead to my residence to show them to my family.—Game Protector A. C. Ganster, Marysville.

Walter Karg, Secretary of the Fryburg Sportsmen's Club, was driving past Butler City Reservoir early in February when he noticed a deer crossing on the ice. Suddenly the deer disappeared. Karg stopped his car and saw that the animal had broken through the ice which was only three-quarters of an inch thick. He took a rope from his car and approached the deer with the thought of rescuing the helpless creature. However, the deer started working his two front feet like pistons, breaking the ice as he swam. Reversing direction, the deer started toward the shore and finally reached a point where the ice was thicker. Here he rested for a few minutes, then dug his front hoofs into the ice and maneuvered himself into such a position that he got one hind leg out of water. With great effort the animal pulled himself all the way onto the ice where he stood for a minute shaking the water from his body. Then, off he dashed towards the woods, apparently none the worse for his cold bath.—Special Service Assistant James A. Brown, Oil City.





Virginia Proves Value of Forestry and Game Management

A management plan for the Virginia National Forests evolved by the State Commission of Game and Inland Fisheries and the U. S. Forest Service has produced startling results during the past 10 years, according to the Wildlife Management Institute. The Dominion State's program might well serve as a model for action in other states where national forest lands exist.

Under the Virginia forest-game management plan deer have multiplied ten fold, and bear, turkey, squirrel, raccoon and ruffed grouse are increasing steadily. Foresters and game managers work closely together to create the best possible habitat for wildlife consistent with good silviculture. An unbroken forest does not provide habitat for game. Deer, bear, turkeys and grouse reach their greatest numbers in areas where the forest cover is broken by many clearings.

During the past decade the program on the state's two national forests has been directed toward habitat improvement composed in part of selective timber harvesting and in part of supplementary but specific wildlife management practices. Roughly 1,000 miles of trails and wooded roads have been opened and improved for game. Hundreds of waterholes have been established and thousands of food-bearing shrubs and trees planted in clearings along forest edges. Old orchards have been rejuvenated and their grounds seeded. Clearings have been planted with wildlife food plants and some 1,700 white-tailed deer have been restocked on the areas. Refuges have been zoned and fenced.

All work is organized on a unit management basis calling for the greatest degree of coordination between the Commission and the Forest Service. The district ranger, the game manager, the state game technician, and the county game warden all work together with a common purpose and a common determination. Improvements for wildlife are financed through the sale of a one-dollar stamp which is required, in addition to a state license, of all hunters and fishermen using the federal land. In addition to stamp money, Pittman-Robertson funds are being used to finance further habitat improvement projects.

Continent's Duck Increase 12% Goose Increase 32%, F.W.S. Estimates

The "encouraging increase" in the continent's duck and goose populations, reported last month by the Fish and Wildlife Service, was estimated at 12 percent for ducks and 32 percent for geese.

The Service's annual inventory of North America's migratory waterfowl on the wintering grounds, conducted January 11-14, also revealed a 39 percent increase in the brant population, a 20 percent increase in swan, but a 56 percent decrease in coot. The heavy decline in coots, reported on wintering grounds in the Western United States and below the U. S. border, created a decrease of 1 percent in the total continental waterfowl population.

Design For New Federal "Duck Stamp" Announced

The design selected for the Federal "duck stamp" to be used during the 1949-50 hunting season will feature goldeneye ducks, Albert M. Day, Director, Fish and Wildlife Service, announced recently.

All duck stamps show wild ducks or geese of different species in some characteristic flight phase. The design for the 1949-50 stamp is the work of "Roge" E. Preuss, freelance artist and decoy designer of 3618 First Avenue South, Minneapolis, Minn. The original sketch, a black and white wash drawing, shows a male and female goldeneye winging in to a quiet cove to view the courtship antics of two male ducks on the water.



Photo Courtesy Pittsburgh Post-Gazette.
Pioneer game conservationist John M. Phillips, left, receives badge of first deputy game protector in Pennsylvania on his 88th birthday in February. Ross L. Leffler, president of the Pennsylvania Game Commission, is making the presentation.

1948 HUNTING ACCIDENTS

	Fatal		Non-Fatal		Total	
	No.	Per-cent	No.	Per-cent	No.	Per-cent
Total Accidents						
Self-inflicted	6	26.1	67	16.0	73	16.6
Inflicted by others	17	73.9	351	84.0	368	83.4
Ages of Victims						
Under 21 years of age	8	34.8	113	27.0	121	27.4
21 years of age and over	13	56.5	285	68.2	298	67.6
Age unknown	2	8.7	20	4.8	22	5.0
Ages of Persons Inflicting Injury						
Under 21 years of age	9	52.9	65	18.5	74	20.1
21 years of age and over	5	29.4	197	56.1	202	54.9
Age unknown	3	17.7	89	25.4	92	25.0
Kind of Game Hunted						
Big game	9	39.1	59	14.1	68	15.4
Small game	14	60.9	359	85.9	373	84.6
Accident Occurred Thru Use of						
Shotgun	10	43.5	354	84.7	364	82.5
Rifle	13	56.5	61	14.6	74	16.8
Pistol	0	....	3	.7	3	.7
Cause of Accidents						
Gun placed in dangerous position	13	56.5	65	15.6	78	17.7
Recoiled or stray bullet	1	4.4	86	20.6	87	19.7
Did not see victim in line of fire	4	17.3	185	44.2	189	42.9
Hunter slipped and fell (with safety off)	1	4.4	27	6.5	28	6.3
Shot in mistake for game	2	8.7	20	4.8	22	5.0
Loading or unloading gun	1	4.4	17	4.0	18	4.1
Gun exploded (unsafe firearms)	0	....	11	2.6	11	2.5
Using gun as a club	0	....	2	.5	2	.5
Unknown	1	4.3	5	1.2	6	1.3
Where Accidents Occurred						
Fields	4	17.3	121	28.9	125	28.3
Brush	3	13.0	145	34.7	148	33.5
Open woodland	8	34.8	55	13.2	63	14.3
Dense woodland	2	8.7	50	11.9	52	11.8
Water	0	....	3	.7	3	.7
Conveyance	0	....	2	.5	2	.5
Camp	1	4.4	10	2.4	11	2.5
Woods road or public highway	5	21.8	32	7.7	37	8.4
Weather Conditions						
Clear	12	52.1	176	42.1	188	42.6
Rain	2	8.7	58	13.9	60	13.6
Snow	1	4.4	11	2.6	12	2.7
Cloudy	6	26.0	113	27.0	119	27.0
Fog	0	....	26	6.2	26	5.9
Light	0	....	15	3.6	15	3.4
Dusk	1	4.4	13	3.1	14	3.2
Dark	1	4.4	6	1.5	7	1.6
Red Worn by Injured						
Red cap	5	21.7	150	35.9	155	35.2
Red back	2	8.7	50	12.0	52	11.8
Red cap and back	8	34.8	131	31.3	139	31.5
No red worn	8	34.8	87	20.8	95	21.5

SUMMARY OF ALL CLASSES OF 1948 SHOOTING INJURIES

Fatal 23—5.2% Non-fatal 418—94.8% Total 441—100%
One fatal accident for every 37 645 licenses. One non-fatal accident for every 2.071 licenses.
Report to date, subject to final audit, indicate 865,824 hunting licenses were issued in 1948.

1948 HUNTING ACCIDENTS COMPARED WITH PREVIOUS TEN-YEAR PERIOD

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	Total 10 Yr. Av.	1948
Fatal	50	44	43	26	26	27	23	37	29	29	334*	23
Non-Fatal	438	346	419	370	327	191	209	232	337	426	3295†	418

* Of this total 15.3% were self-inflicted and 84.7% inflicted by others.
† Of this total 15.3% were self-inflicted and 84.7 inflicted by others.



ROBERT LAMBERTON

Reappointment of Mr. Robert Lamberton, Franklin, as a member of the Pennsylvania Game Commission was announced in February by Governor Duff. Mr. Lamberton has served as a Commissioner since 1935 and has been the Commission's elected vice-president since 1942. His present term of office will expire in 1957.

Ohio Plans Model Deer Management Program

Ohio, with a deer herd only recently developed to harvestable size, is taking full advantage of its opportunity to profit by the mistakes of other states in the management of its restored deer herd, the Wildlife Management Institute reports. The buck law is being used in Ohio as a tool of management, as it should be used, rather than as a fetish. The "overselling" of this law in some states became a grave source of trouble when the phenomenal growth of the herds early in the century caught game administrators by surprise. The Conservation Commission, however, is carefully indoctrinating the sportsmen of the state with the idea that the regulated harvest of does frequently is essential for the welfare and preservation of this resource.

Three counties in southern Ohio recently were opened to the taking of bucks only in 1943, 1944, and 1945. In 1947 when the deer in northeastern counties became a menace to travel on the highways and to farm crops, a season for eight counties allowing both does and bucks to be killed was permitted. Five more counties were added to the hunting area in 1948 and the season was lengthened to six full days. Reports to date indicate a record kill of 3200 deer. An intensive management program financed by a \$5.00 special deer hunting license is being started to study the problem in the Buckeye State to assure the best possible use of this resource.

STOLEN

Model 430 Savage Over and Under 12 gauge shotgun. Serial Number 28419. The gun was stolen from a truck prior to the start of the Pigeon Creek Fox Hunt staged on February 6, 1949 at Cokesburg. Any person having knowledge of this firearm is asked to contact Mr. J. Earl Graham, Box 132, Fayette City.



Pennsylvania's wildlife program was selected as a model for study last month by the chief game administrator of Mexico. Shown here are Dr. Ward M. Sharp, left, leader of the Pennsylvania Cooperative Wildlife Research Unit; Senor Luis Macias, center, Chief of the Mexican Game Department; and Tom Frye, right, Commission Executive Director, as the trio met in the Harrisburg offices of the Game Commission.



JOHN C. HERMAN

Reappointment of Mr. John C. Herman, Dauphin, as a member of the Pennsylvania Game Commission was announced in February by Governor Duff. Mr. Herman has served as a Commissioner since 1944 and his present term will expire in 1957.

Old Ohio Strip Mines Produce Wildlife

Open-pit mining in Ohio is on the verge of becoming a double asset to the state, according to the Wildlife Management Institute. Thanks to action by the Association of Strip Miners and various state conservation agencies, old, worked-out mines, which to now have scarred the mining country landscape with unsightly mounds of rubble and raw earth, are on the verge of becoming havens for wildlife.

Strip-mine areas, once the coal has been exhausted, become biological deserts and liabilities to nearby communities. Research work in Ohio and in Pennsylvania, however, show that they have great potentialities for forest, recreational, and wildlife use. Steps now are being taken to restore them to productivity and to make strip-mining an asset long after the last ton of coal has been removed. C. V. Riley, a graduate research student with the Ohio Cooperative Wildlife Research Unit, has obtained encouraging results from research in the rehabilitation of these areas. Experimental projects on revegetated spoil banks in Tuscarawas county supported larger wildlife populations than was found on adjacent unmined agricultural lands.

Few strip-mine areas are suitable for agriculture, but the Ohio studies show that they have great possibilities for wildlife and forestry use. The Ohio Division of Conservation and Natural Resources, the Ohio Cooperative Wildlife Research Unit, and the Association of Strip Miners are working closely to achieve the maximum productivity from these barren areas for public benefit.

Pennsylvania Game Commission LEGAL BIG GAME KILL

(Based on Tabulation of Game-Kill Reports)

Counties	Deer—Legal		Antlered		Deer—Legal		Antlerless		Bears	
	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948
Adams	96	96	153	...	...	...	...	...	...	...
Allegheny	23	36	35	...	...	...	...	...	...	...
Armstrong	170	316	145	...	...	...	...	...	...	...
Beaver	42	63	44	...	...	...	...	...	...	...
Bedford	459	541	620	...	...	...	...	...	...	...
Berks	249	195	634	...	...	...	...	...	...	...
Blair	331	439	451	...	...	...	...	...	...	...
Bradford	556	760	1,230	17	11	...	...	...	...	...
Bucks	42	72	43	...	...	...	...	...	...	...
Butler	163	261	127	...	...	...	...	...	...	...
Cambria	270	368	491	1	...	...	...	...	...	...
Cameron	666	994	799	62	58	...	...	...	...	...
Carbon	285	295	329	2	1	...	...	...	...	...
Centre	1,394	1,529	2,461	17	9	...	...	...	...	...
Chester	20	43	34	...	...	...	...	...	...	...
Clarion	261	357	242	3	2	...	...	...	...	...
Clearfield	1,022	1,372	2,645	7	5	...	...	...	...	...
Clinton	1,011	1,308	1,127	38	45	...	...	...	...	...
Columbia	272	274	417	1	1	...	...	...	...	...
Crawford	344	348	343	...	...	...	...	...	...	...
Cumberland	242	165	649	...	...	...	...	...	...	...
Dauphin	300	305	537	...	...	...	...	...	...	...
Delaware	1	9	1	...	...	...	...	...	...	...
Elk	2,077	1,866	7,563	15	17	...	...	...	...	...
Erie	231	246	195	...	...	...	...	...	...	...
Fayette	342	356	460	...	...	...	...	...	...	...
Forest	1,249	998	5,968	33	23	...	...	...	...	...
Franklin	223	236	230	...	...	...	...	...	...	...
Fulton	171	231	...	...	...	...	...	...	...	...
Greene	28	20	15	...	...	...	...	...	...	...
Huntingdon	801	752	1,023	...	...	...	...	...	...	...
Indiana	286	413	172	...	...	...	...	...	...	...
Jefferson	552	646	928	19	12	...	...	...	...	...
Juniata	227	197	248	...	...	...	...	...	...	...
Lackawanna	206	187	409	3	2	...	...	...	...	...
Lancaster	24	33	19	...	...	...	...	...	...	...
Lawrence	37	53	28	...	...	...	...	...	...	...
Lebanon	92	115	200	...	...	...	...	...	...	...
Lehigh	63	36	145	...	...	...	...	...	...	...
Luzerne	690	770	1,406	4	...	...	...	...	...	...
Lycoming	1,400	1,615	1,916	38	32	...	...	...	...	...
McKean	2,108	1,982	6,168	47	21	...	...	...	...	...
Mercer	92	101	107	...	...	...	...	...	...	...
Mifflin	272	274	310	1	2	...	...	...	...	...
Monroe	671	648	1,275	7	13	...	...	...	...	...
Montgomery	18	19	30	...	...	...	...	...	...	...
Montour	56	45	49	...	...	...	...	...	...	...
Northampton	93	72	210	...	...	...	...	...	...	...
Northumberland	126	152	181	...	...	...	...	...	...	...
Perry	338	320	368	...	...	...	...	...	...	...
Philadelphia	...	...	...	...	...	...	...	...	...	...
Pike	914	959	2,215	36	40	...	...	...	...	...
Potter	2,337	2,449	3,721	65	34	...	...	...	...	...
Schuylkill	390	438	640	...	...	...	...	...	...	...
Snyder	128	111	116	2	2	...	...	...	...	...
Somerset	649	791	768	...	...	...	...	...	...	...
Sullivan	913	837	2,434	58	7	...	...	...	...	...
Susquehanna	382	421	413	...	...	...	...	...	...	...
Tioga	1,335	1,367	1,476	29	27	...	...	...	...	...
Union	196	251	183	8	8	...	...	...	...	...
Venango	654	577	1,611	3	2	...	...	...	...	...
Warren	1,484	1,271	5,012	36	10	...	...	...	...	...
Washington	5	13	9	...	...	...	...	...	...	...
Wayne	609	608	703	6	3	...	...	...	...	...
Westmoreland	375	584	286	...	...	...	...	...	...	...
Wyoming	346	313	617	11	1	...	...	...	...	...
York	36	56	38	...	...	...	...	...	...	...
County Unknown	30	33	146	...	...	...	...	...	...	...
Totals	31,475	33,608	63,568	569	388	...	...	...	...	...

FIELD OFFICERS' ESTIMATES ON ADDITIONAL KILLS OF BIG GAME (STATEWIDE)

Classification	1947	1948
Deer, Accidentally killed on Highways, etc.	3,476	3,697
Deer, Illegally killed during year	5,072	4,526
Bears, Illegally	74	90

Four States Make Grouse Studies

Maine is the fourth state to inaugurate a sex-and-age ratio study of the ruffed grouse, the Wildlife Management Instituted stated recently. Merwin Marston, head of the wildlife division of the Maine Inland Fisheries and Game Commission has called upon sportsmen to cooperate by sending wings and tails of all birds killed to the division office for examination. Similar studies were made recently by Massachusetts, Michigan, and New York.

The length of the two middle tail feathers

is the best known indicator of sex without dissection. The tail feathers of male birds average an inch longer than those of the females. Young birds may be distinguished from mature grouse by the fact that the young do not shed their two outer primaries in the first molt while adults lose all primaries each year. The conspicuous black tail band is not an infallible index of sex, the studies made in New York, Massachusetts, and Michigan show. In Massachusetts 37 per cent of the cocks examined had broken tail bands. All females examined in all surveys had broken bands except one.



BULLET PERFORMANCE

By TED TRUEBLOOD

A FRIEND of mine who should know better told me a terrible whopper recently. He went hunting in Idaho last fall and killed a bull elk with his 300 magnum. On the first shot, at about 300 yards (that's what he said) the bull went down. My friend ran toward it and it got up. He shot it again, hitting it in the neck and killing it.

When he reached it, he discovered that his first shot had hit it in the hock. "Imagine that!" he said. "The terrific shocking power of that 180-grain, soft-point bullet hitting the bull in the ankle was enough to knock it down!"

He was perfectly sincere. I didn't tell him he was crazy, or even laugh. I know what happened, however. The bull was climbing when my friend shot. It had its weight on that foot, and when the bullet broke the hock it fell down because that leg wouldn't support it.

You could do the same thing to a man if you hit him on the shin with a baseball bat. In fact, you probably could do it to an elk if you had a good, lusty wallop and his weight happened to be distributed just right. But you don't go around knocking things down by shooting them in the foot—not even rabbits.

According to the Western ballistic figures, the 180-grain, silvertip 300 magnum bullet has 2150 foot pounds energy remaining at 300 yards. The 180-grain 30-06 has 2500 at 100 yards. In other words, the striking force of the 300 magnum is considerably less at 300 yards than the 30-06 is at 100.

I once broke the leg of a medium-size deer at about 75 yards with a 30-06, but the bullet didn't knock him down. How then, could the 300 knock down an animal weighing four times as much by hitting it in the hock—more than three times as far away? The answer, of course, is that it couldn't but the story is typical of some of the ridiculous ideas that almost any hunter is likely to come up with occasionally if he doesn't stop to analyze them before he lets his enthusiasm carry him away.

One of the most common evidences of this foolishness from which we all suffer is that most of our conversation about shooting is centered around the guns, not the bullets they shoot. Now, a beautiful rifle is a joy forever, and I'm in favor of them. Actually, however, the rifle itself doesn't bag any game. It is the bullet that does the all-important job of anchoring a buck where he is hit—if it does. In addition, of course, good accuracy is impossible without good bullets, regardless of the inherent accuracy of the rifle from which they are fired.

Designing a satisfactory hunting bullet is not as easy as it might seem. Consider the soft point. If too much lead is exposed and the jacket is too thin, the bullet goes to pieces when it strikes at close range. The velocity still is high. This same bullet probably would mushroom perfectly at long range.

If the jacket is heavier and less lead is exposed, the bullet might perform perfectly at close range, but fail to open up at all at 200 yards after it had shed a fifth of its velocity.

(Continued on Page 29)

CARE OF THE GUN DOG

By HERBERT KENDRICK

THE average hunter needs very little encouragement for supplying his dog with affectionate care and attention when autumn turns leaves and ripens harvests. Then as the seasons close and trout streams beckon the faithful animal is usually returned to the kennel and somewhat neglected during the trying period of hot summer months, when a little care and attention would make his life more pleasant and healthy, thus making him a far more valuable asset when a new hunting season appears. A well-bred and trained gun dog is a valuable animal and should certainly be well cared for every day of his life, and the man who cannot find time for his care should employ someone to do it or send him to a dependable commercial kennel.

With the arrival of hot unpleasant days comes the usual swarms of insects and parasites to make your dog's life more of a "dog's life." These disease bearing plagues can cause serious illness if they are allowed to go unchecked.

First of all, the dog's house should be cleaned often, white-washed, and supplied with cedar bedding. Cedar sawdust or shavings are a distinct discouragement to insects. The runways or yards around the dog house should be kept clean at all times, thus preventing the breeding of parasites.

If a dog is kept in a double-wired pen where stray dogs cannot contact your own, it will keep the insect problem down to a minimum.

Dust your dogs frequently with a good reliable flea powder. This dusting will kill fleas and lice, and a good spray used wisely and often will prevent flies and mosquitoes from irritating the dog. A word of caution here, however, if your dog has puppies. Be very careful to keep the powder and spray from the puppies' noses and the mother's breasts.

The dog *must* have shade at least during the heat of the day. Tree shade is best but if his quarters cannot be located near trees, then artificial shade in the form of a roof or shelter must be provided.

Many professional handlers give their dogs a daily swim in the creek or lake, thus providing cool, clean exercise.

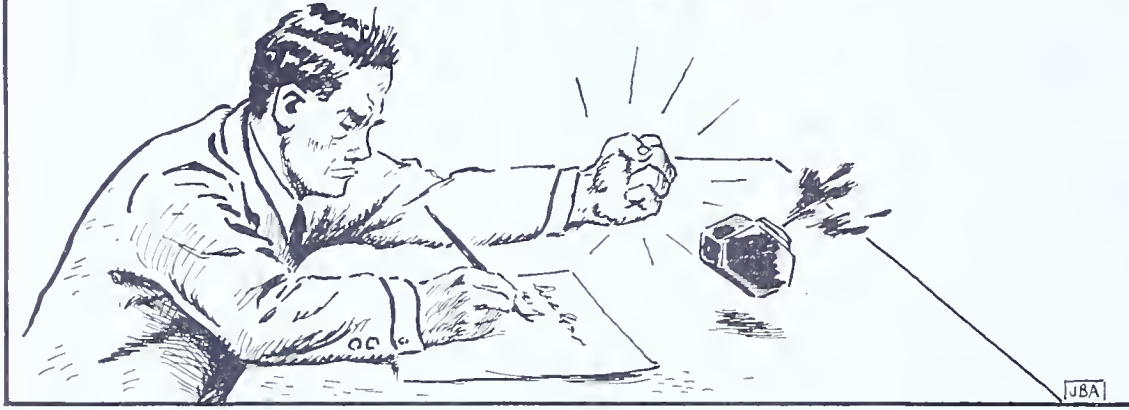
One of the most important needs of summer is an abundant supply of fresh cool drinking water. A small pipe running from a house spigot down to the dog's water container is a handy way to keep him well supplied with minimum effort. If this arrangement is impossible supply each dog with a container that holds at least a gallon of water, and fill it at least twice each day.

Occasional dusting of air-slacked lime will keep the pen from becoming smelly and foul, and the water hose should be used to keep down dust during the dry season.

One of the best ways to judge a dog's condition is by the quality of his hair. If he is powdered and brushed, given proper food, sufficient fresh water, and possesses general good health his coat will always be glossy and silky. Bathing is not important.

(Continued on Page 29)

PEN NOTES



January 25, 1949.

Hon. Ross L. Leffler, President
Pennsylvania Game Commission
Harrisburg, Pa.

Dear Sir:

On your radio program this evening you spoke of the farmer or landowner and what they have done for the sportsmen in throwing open their lands to public hunting. But there is another side to this question. That is, the disregard the sportsmen have shown for the landowner and farmer. Several years ago there was a law passed defining a Safety Zone around houses and occupied buildings. This law was disregarded in this locality this year. No one seemed to pay any attention to it. I live in a rather thickly populated district. There is more than one half mile square here where houses are located so close together it would be impossible to hunt or discharge a firearm without violating the Safety Zone law. During the small game season there were more than 300 violations in this area and the landowners and farmers are sore over the matter.

I would suggest that Section 808 of the Game Law be changed to read "any person violating this section be fined \$25 and his license revoked for a period of two to three years." Then, the Game Commission should have enough men out in the field to enforce the law. Most of the hunters feel that there is not one chance in a thousand that they will be picked up. I do not see why the Commission does not add enough Deputy Game Protectors to take care of this situation.

Why not ask the hunting and fishing clubs of the State to recommend men for the office of Deputy Game Protector. Then have the District Game Protector screen these men to find those suitable for the position.

You are doing a fine thing in publishing the names of offenders in the GAME NEWS but that is not enough. Every case should be given to the local newspapers for publication.

Another thing that I think should be done is to change the law to allow a Deputy Game Protector to retain one half of the fine. It is hardly fair to ask any person to go out and spend his time in the fields and then not make enough to pay expenses.

Very truly yours,

H. L. KREPPS,
Mt. Pleasant.

February 4, 1949.

Mr. H. L. Krepps
Mt. Pleasant, Pa.

Dear Mr. Krepps:

I was glad to receive your very interesting letter and to hear from you again. Indeed I do remember you very well and the fine work you did in Fayette County. Once you become interested in Conservation, you never lose that interest, although you may not be actively engaged in the work.

You are absolutely right about the vast number of violations within safety zones, during the past season. We were deluged with complaints from every section, even within the confines of residential areas in the large cities and towns. This past hunting season hit an all time high for wanton disregard of both life and property, and also, topped the list for illegal kills. The infraction of rules and the poor sportsmanship displayed has aroused considerable aversion to hunters on the part of the landowners, and they are up in arms. Next season will see thousands of acres of posted lands added to the list.

Being fully cognizant of the situation and realizing something must be done to alleviate the condition, the Commission at the last meeting approved a plan to deputize a large group of sportsmen, who will be willing to aid in reducing these violations. They will, however, have to serve without remuneration. We could not afford to hire sufficient game protectors to cover the entire territory open to hunters, nor do we have the funds necessary to pay deputies.

The method of paying deputies from fines was tried out before and caused a great deal of trouble, because of the fact that money became the prime factor, rendering the practice intolerable.

I feel sure there are enough real sportsmen, sufficiently interested in preserving their sport and good sportsmanship, who will be willing to put forth their individual effort in combating this evil as their contribution to the cause.

With regard to Section 808 of the Game Laws governing safety zones, we do now revoke licenses for such violations, along with the fine.

Your suggestion to publish the names of violators in the local papers as well as in the GAME NEWS, is an excellent one and will be brought to the attention of the Commission, although our district men have such permission.

Thank you very much for your interest and cooperation.

Sincerely yours,

ROSS LEFFLER,
President

STATE GAME LANDS 127—

from Page 6

As a result of the acquisition of this State Game Lands through the Game Fund, the hunters have provided the fishermen and others an ideal recreational area. A fact that too few appreciate and recognize. The lake and the approximate 15 miles of trout streams provide much needed public fishing waters. This is an outstanding feature in an area where public waters are few and far between in comparison to the great demand of public. Much sport has been provided by the presence of large and small mouthed bass, perch, sunfish, catfish and trout that are available.

An exception in the management of over 860,000 acres of State Game Lands was agreed upon by the Pennsylvania Game Commission in the case of State Game Lands No. 127 and Brady's Lake. Greater use of the area for fishing and other recreational purposes is in no way interfering with the primary objectives of public hunting for which the property was acquired. Without such modifications in the general regulations governing the use of State Game Lands, maximum public enjoyment of this unique combination of land and water would not be possible. At a meeting on May 6, 1944, the Commission after a careful survey, agreed to improve the public recreational facilities by (1) Permitting fishing from the shoreline or wading between 5 A. M. and 10 P. M. daily from April 15 to September 30, inclusive. (2) Permitting fishing from rowboats and canoes during the same hours from July 1st to September 30, inclusive. (3) Allowing owners of such rowboats and canoes to leave them on the property at their own risk, provided they register their name and address with the officer in charge. (4) Permitting the use of the road leading to a special parking lot, except during hours when fishing is not permitted. (5) Permitting the building of fires for cooking purposes at designated fireplaces.



R. D. Parlamen Photo.

A true memorial to the greatness of Pennsylvania's former "tall timber" is the towering spruce tree found on Game Lands 127.

Pennsylvania Youth Group Aids Conservation

A private, non-profit youth group in Luzerne County, Pennsylvania, is playing a large part in the conservation and restoration of wildlife, the Wildlife Management Institute reports. Organized early in 1947 by Mr. and Mrs. John B. Wysock of Plymouth, the Wysock Junior Conservation Club, Incorporated, was formed to interest as many youngsters as possible in the outdoors and to lead them in the path toward good sportsmanship.

The membership numbers 109 at the present time, and officers and members are between 10 and 16 years of age. The boys finance their program by paying 10 cents in weekly dues, by collecting newspapers, magazines, and scrap, and by sponsoring fox hunts and shooting matches. They already own their own truck and two clay-pigeon traps, and purchase ammunition in bulk lots for the members.

Qualifications for membership are simple and to the point. Other than the age requirements, each new member must have the written consent of his parents and sign a pledge which commits him to be careful with fire in the woods and to the protection of wildlife and forests. The pledge states: "I believe that every citizen should endeavor to see that our forests, wildlife, soils, waters, and minerals are protected and conserved for our public good." Group activities and projects are diversified and give the boys close contact with conservation problems in the field. The members help state game protectors stock fish and game, they feed game birds in winter, plant food and cover patches and trees, erect nesting boxes, and live-trap rabbits from gardens for release in more suitable habitat. They distribute posters for the state game commission and sponsor swimming, fishing, and fox hunting parties. Future club plans for a pheasant rearing project.

Officers of the organization, all of Plymouth, are: Ken Lamereaux, president; Joseph Rogers, vice-president; Raymond Lamereaux, financial secretary; and James Kelly, treasurer. Mr. Wysock serves as senior president and director. Such an organization as this in each town of comparable size across the nation would spell the end of juvenile delinquency and do much to mold our future population into good citizens with a close kinship with nature.



Members of the Deerfoot Rod and Gun Club of Terrace are shown here gathered for a recent meeting. This western Pennsylvania group has increased its membership from 25 to over 200 in the past three years. Club officers include E. B. Schick, president; J. Furnival, vice-president; R. W. Schick, secretary; and James Guest, treasurer.



"No Hunting" Signs Come Down in Oklahoma

"No Hunting" signs of the "this-means-you" variety, which have dotted the landscape in its county, are being replaced rapidly by the Cleveland County Sportsman's Club of Norman, Oklahoma, the Wildlife Management Institute reports. In their places on fence posts and periphery trees are going neatly printed placards bearing the words "Hunting or Fishing by Permission Only."

The club offers a \$25 fine for information leading to the arrest and conviction of any one destroying a farmer's property while hunting and fishing and another \$25 for information leading to the apprehension of any one violating the state fish and game laws.

Such action by a sportman's club is to be commended as an extremely progressive step toward improving farmer-sportsman relations. The system employed by the Cleveland County Sportsman's Club increases the acreage available to the law-abiding sportsman for his hunting and fishing, assures him of a hearty welcome from the farmer, and protects the landowner, the sportsman, and the game from the criminally thoughtless and the vandal. Other clubs in all other states could employ the same method to good effect.

Waterfowl Need Local Assistance

Ever since passage of the Migratory Bird Act placed the major responsibility for waterfowl management in the hands of the Federal Government, sportsmen and individual states have depended heavily upon the federal agencies to take care of the ducks. The public now is beginning to realize that the problem of restoration and conservation of our waterfowl resources is too vast for the Government to handle unassisted, according to the Wildlife Management Institute.

In the past few years the U. S. Fish and Wildlife Service has done an excellent job with the facilities and manpower at its command. The Service, however, needs the support and cooperation of the individual states, of private organizations, and of the individual duck hunter. At the recent meeting of the International Association of Game, Fish and Conservation Commissioners in Atlantic City, an entire discussion panel was devoted to the part the provinces and states can play in waterfowl restoration. Representatives of Canada, the individual states, and private organizations presented papers pertaining to waterfowl, and emphasis was directed to the role the states and individuals can and should play in the broad program.

In recent years the need for local help in managing the duck crop has become more evident. Realization of this need recently spurred the formation of the Joint Black Duck Committee in the East as it instigated the formation of Ducks Unlimited a few years back. Ways in which the individual or small organization can assist are told in a booklet entitled "Waterfowl Management on Small Areas" by C. E. Addy and L. G. MacNamara, which may be obtained free upon individual request from the Wildlife Management Institute, Washington 5, D. C.

The cheetah or hunting leopard of India is credited with being the swiftest four-footed animal.

A gopher will dig a hole about three feet straight down.

TOO MANY DEER—from Page 3



Part of a deer herd in a winter yard. Note the poor condition of yearlings which cannot reach browse in competition with larger deer.

Mountain laurel and rhododendron are not eaten so freely as the other species except in times of severe feed shortages, because these plants have little nutritional value and are less palatable than other species. Toxic poisoning can be caused by either laurel or rhododendron if a deer eats a quantity of these plants equal to 1.5% (an approximate figure) of its live weight; thus, a 150 pound buck would have to eat at least 2.25 pounds of either of these plants before poisoning would set in. Cases of toxic poisoning, however, are relatively few in number, according to the results of research conducted by the Pennsylvania Game Commission.

The majority of deaths caused by starvation occur among fawns. In the winter months, especially if a heavy snowfall or hard crust of snow covers the ground, feeding activity among the deer is drastically curtailed. Besides covering suitable browse, a heavy snow fall restricts the deer's travels to other feeding areas. The younger deer have difficulty in securing feed during such a period because, in many cases, older deer chase them away from any suitable food. This inability to get the more nourishing food forces the younger deer to browse on the less palatable plants, such as laurel or rhododendron. Since these two plants have little nutritional value, the fawns and young deer grow too weak to secure any food. Consequently, these starving deer die of malnutrition, cold, pneumonia, or rickets.

Various methods of combatting the starvation problem have been tried, but most of them have not been very successful. The trapping of deer in overpopulated areas (previously mentioned in connection with farm damage), for example, has proved too costly and laborious to be carried out extensively. Another method, artificial feeding

during the critical months, has been employed as a temporary relief measure, but many sportsmen believe it does more harm than good. According to these sportsmen, deer concentrate in the same area from year to year close to the place where feed has been placed before, and this continuous concentration reduces the amount of natural feed available until the area is not capable of supporting deer for years to come.

Range improvement programs have also been tried. Nut-bearing shrubs and trees have been planted over deer ranges to increase the future food supply. In addition to these shrubs and trees, small fields and patches of ground in or near the woods have been planted with clover, and grains such as buckwheat, which aid in saving the more important browse for winter. However the lack of suitable land for planting has hampered the success of this plan. Since redistributing the deer and increasing the food supply by artificial means have failed to relieve starvation, there is only one other alternative: reducing the deer herd.

This reduction is performed by doe seasons and it seems to be the most effective way of fighting the starvation problem. Its results in reducing deer herds are quite well-known to the hunters of Pennsylvania. And furthermore, doe seasons serve the dual purpose of decreasing the number of deer and at the same time establishing a more equal ratio of bucks to doe. In this way it acts as a "thinning-out" process. Although this method seems to be the best way of meeting the problem, still, careful planning of doe seasons (in regard to the number of deer and the buck-to-doe ratio at the time) is necessary.

A carefully planned reduction of the number of deer has at least three distinct ad-

Game Protector's Tips

The cottontail rabbit is the average small game hunter's meat, but it sometimes proves a pest and a torment to orchardists, nurserymen and gardeners. In spite of dogs, cats, vehicles and man, bunnies thrive and multiply in cities, towns and parks. Each winter, the Game Commission appoints agents to live-trap unwanted rabbits. Those taken are released in open hunting territory to produce for the hunter. In winter, when snow covers the ground and food is scarce, these animals come readily to trap. In the growing season, with fresh, natural food available, the rabbit turns up his little nose at wilted bait in traps.

If rabbits bother you this spring or summer, inform your District Game Protector. He will place your property on the list of those to be trapped next winter. Successful winter trapping removes brood stock, resulting in reduced trouble the following years. There are several simple, safe repellents that usually work well in turning back bunnies which otherwise might damage vegetable and flower gardens. Certain sprays and powders will do the trick but, used on leafy vegetables, are injurious to humans. Moth crystals or crushed moth balls, laid in a line about a garden, often turn the animals back. A dilute spray, made of 1 or 2 tablespoonfuls of lysol to 10 quarts of water often brings good results. Aluminum sulphate spray, dried blood and nicotine powder are other answers to this problem. Insect powders or sprays must be used anyway, to rid gardens of plant pests. One such, Rotonone, has often been used effectively as a combined bug killer and rabbit repellent.

vantages. First, it gives the native shrubs and trees in the forests a chance to grow again, thus building up the supply of nutritional browsing material for future years. It has been estimated that as high as 70% of the natural forest reproductive growth can be eaten by deer without halting the growth of shrubs and trees that will make up future forests. Second, reduction of the number of doe, helps develop a better breed of deer—well-fed deer produce larger, heavier, and stronger offspring. And third, reduction of the deer herds minimizes the amount of property and crop damage.

The Game Commission would like to have one deer for 15 or 20 acres of forest under ideal browsing conditions, or one deer to 40 acres under normal browsing conditions. In other words, when the deer consume no more than 70% of the natural browse, the hunters of this state will be assured good hunting every year and Pennsylvania will have its ideal deer herd.

INTRODUCTION OF EXOTIC SPECIES—from Page 5

ago. Recently, since the Alaska natives have been given custody of the reindeer, the herds have dwindled to an estimated 150,000. The losses are largely chargeable to neglect, indiscriminate killing for dog food, loss to wolf packs, and mixture with roving bands of caribou which also frequent the same ranges. Biologically, reindeer proved themselves to be well adapted to the Alaskan tundra.

Muskoxen were also introduced into Alaska in an attempt to provide a new source of food and clothing for the natives. Thirty-four animals were captured in Greenland, and shipped to Fairbanks, Alaska, in 1930. Under fence at the University Experiment Station there, they diminished in number to a herd of 31 animals due to confinement in captivity and their seeming enjoyment in picking fights with bears. Then, in 1935, because of a reduction of appropriations, the animals had to be moved to Nunivak Island off the west coast of Alaska. The herd has gradually recovered to a total of 44 animals at present, and with better protection from poaching and destruction by loose sled dogs they could no doubt be built into a sizeable herd.

In the field of sport fishes, perhaps the success of introducing the German brown trout should offset the mistake of bringing in German carp. Or one might cite the transplanting of striped bass from the Chesapeake Bay country on the Atlantic coast to San Francisco Bay in 1879 and 1881. They have since spread all along the Pacific coast. These fine sport fish really thrive in Pacific waters, and now probably are a more popular game fish on the West Coast than they are on the Atlantic. The Atlantic Shad is another East Coast fish that has done exceptionally well since it was introduced into the Columbia River. The Eastern Brook Trout, of course, has been planted all over the country, and has added new sport to the streams of many States where it was never found originally.

We Americans have been much more conservative in the matter of introducing exotic forms of wildlife than we have other animals and plants. Perhaps that is because the North American continent originally supported such an abundance of fine varieties of wild mammals, birds, and fishes. The introduction of other exotics was often due to homesickness. People have a tendency to want about them something of the environment they knew in their youth, and the colonization of America led to the transplanting of many forms that were familiar to the Old World.

In the poultry and animal husbandry field, there are no representatives of pure American strains on our modern farms. Chickens, ducks, and geese, all had their origin elsewhere. Even though the Pilgrims found wild turkeys, our present domestic strains came from Mexican stock. Although the western Indians used horses extensively in the early days of American history, these animals had come northward from Mexico with the Spanish explorers. Beef stock, dairy cattle, hogs, sheep, and goats, all were introduced from Europe or Asia.

Considering the dependence we place upon introduced species of plants and animals in our American way of life, I sometimes wonder if we are being too conservative in our thinking about exotics in the field of wildlife management. Somewhere on the European continent, or in Africa, or Asia, or South America, there may be species that would thrive in those parts of our own United States that are now deficient in game. As hunting increases, as wildlife environment shrinks, as the whole problem grows more complex, should we not be looking into the future? At least to the extent of exploring the possibility of relieving the pressure on native forms by bringing in a few new species?

Some of the fellows who were on foreign duty during the war, have brought back observations of the persistence that game birds and mammals have demonstrated living in areas close to centers of heavy human population, under constant persecution. China and other Asiatic countries are reported to have several species that might fit into our environment as successfully as has the pheasant. Certainly, any game bird or mammal that has managed to survive in the midst of a civilization as old and intense as that in China, has developed wariness, persistence, and the other qualities that go to make up a good game species.

I understand that the bamboo partridge in many of the provinces of China is an excellent game bird. Slightly larger than the bobwhite, it handles well to dogs, is hard to flush, and has a strong, rapid flight. The hill partridge is another that might have



Further work should be done on the strains of wild pheasants throughout China and eastern Asia.

some merit. Numerous species of Asiatic wood partridges are common to many areas of southeastern Asia which have great differences in elevations and temperature. Incidentally, many of the valuable agricultural plants that have succeeded in this country came from that same general area.

Further work should be done on the strains of wild pheasants throughout China and eastern Asia. It is not at all unlikely that with adequate research, some might be located there which would do well in the southern United States. Perhaps the reason that the Chinese ringneck does not accept the South is because of its ancestral background in northern China.

Another bird that might be considered is the Francolin. Nine species, composed of 14 races, have been described by previous explorers in a range extending from the Cape of Good Hope in South Africa to Dakar in West Africa, and to Uganda and Abyssinia in east Africa. This great range embraces all types of African habitat from desert to dense tropical jungle and rain forests. Sub-species of the Francolin are also found from Turkey to the China Sea in temperate to tropical latitudes. Africa has a rather large group of birds, known as sand grouse, which might possibly thrive over much of our western country where the sage hen is having trouble retaining a foothold.

Sporadic attempts have been made in the past to introduce the European black cock and the capercaillie, both fine large grouse found in Sweden and wooded portions of northern Europe. The efforts have never been successful, although if properly pursued it is entirely possible that these fine birds might be established as an addition to our native ruffed, spruce, and blue grouse. It is possible that much of Alaska, western Canada, and portions of several of our northern and New England States might furnish suitable habitat. Wild guinea fowl are considered excellent sport on some of the islands of the Caribbean, and might

(Continued on Page 29)

BEAVER POISED FOR ASSAULT ON PHILADELPHIA?

By W. C. MORRISON



Large-toothed aspen felled by the beavers. The stumps in the lower left are the remains of saplings cut and floated upstream previously.

Beaver in the suburbs of Philadelphia? Never! Unbelievable as it may be a colony of beaver has established itself in southeastern Montgomery County only 1½ miles from the Philadelphia City Limits.

Beaver disappeared from this locality not long after the founding of Penn's colony in 1682. Being a major article of trade, both domestic and foreign, they were intensively hunted until by the end of the nineteenth century they were practically extinct in

Pennsylvania. Through the efforts of the Pennsylvania Game Commission the species was reintroduced and the animals have prospered to the point where they are established in 43 of the state's 67 counties.

The Montgomery County beaver have made themselves at home in the bank of Pennypack Creek behind the dam of the Philadelphia Suburban Water Company. At this spot, just outside of Bethayres, the stream is from fifty to one hundred feet

wide. One side of the creek is paralleled by a highway while the opposite bank is densely wooded. The surrounding country is divided into large estates which have favored its natural beauty over urban development. Consequently the wood here, though not extensive, is much wilder than many areas in more isolated sections of the state. The sight of deer bounding off through the underbrush is not rare.

Local residents first noticed the presence of the beaver in the fall when their logging operations became conspicuous. Few trees or shrubs within fifty feet of the water for a quarter mile above the dam have missed being damaged. In company with Mr. Frederick Ulmer, Curator of Mammals at the Philadelphia Zoological Garden, I made a tour of the area at the end of January to check the damage. Our survey revealed that the beaver had fed on red osier dogwood, large-toothed aspen, white ash, beech, willow, white and red oaks, tulip, red maple, and blue beech. Their feeding preference was in the order as listed. Of the larger trees only hickory has been untouched. At several places, both in the creek and on the bank, the beaver have gathered large piles of brush from which most of the bark and twigs have been stripped. By probing several holes in the creek bank we disturbed the beaver and they swam out in a cloud of mud. Mr. Ulmer estimated that seven or eight beaver are living in the colony.

Only a few miles downstream from where the beaver are located the creek flows through Pennypack Park in Philadelphia. There is a very great likelihood that as soon as competition for their present food supply becomes acute some of the beaver will follow the water into the city.

OUTDOOR KIDS—from Page 7

"Oh, look at the babies," cried Jane as she spied five tiny red mouths waving back and forth on the ends of skinny necks.

Realizing that their secret had been discovered, the little warblers (They are wood warblers, not thrushes at all) fluttered closer and closer, chipping all the while. The mother bird dragged one wing in the water as she fluttered nearby, trying to attract the children's attention away from her precious nest.

"Oh, Billy, let's not disturb them any more," Jane suggested. "Let's run home and tell Pop that we found it."

"Yea, let's tell him right away. He didn't think we could find it, and by golly, Jane, I can see now why he said that. I'll bet he had plenty of trouble finding it himself."

"I don't think he did, Billy," argued Jane as the children hurried through the woods with the water-thrushes behind them. "He told us that these birds have nested in that same bank for at least five straight years."

"That's right," Bill agreed, "Dad said that he found the nest every year around the first of May. I guess they must nest under that same bunch of ferns every year."

"No, they don't," insisted Jane. "Pop said that they pick a new place for their nest every year, but always along that same bank. He has to hunt the new location, but he is so used to knowing where to look that it doesn't take him as long as it took us."

"Didn't Dad say that the Louisiana Water-thrush is the first warbler to come back from the south?" Billy asked as they entered the path that borders the field at the edge of the woods.

"Well it might be the first WARBLER to come back, but it isn't the first bird, that's sure," Jane declared.

"He didn't say that, Jane," Billy answered in a firm voice. "Sure, Bluebirds and Robins and Meadowlarks and Redwings are back sooner, but I'm sure he said that the Louisiana Water-thrush comes back from its winter home in Mexico and the West Indies along about the first of April. And that's long before most warblers arrive here in the north."

"Maybe the reason it comes back so soon is because it leaves us so early, Pop says it goes away in August," said Jane. "And I'll bet that's why it has only one nest each year," she added.

The children were in sight of the house now, and they walked hurriedly as they saw their father come onto the porch.

"We found it! We found it!" they cried as they started to run up the walk.

INTRODUCTION OF EXOTIC SPECIES—from Page 27

be established on the South. These are a few of the possibilities of adding to our native stock of game birds by bringing in exotics that have a fair chance of succeeding in habitat which is not now producing what it should. There may be some strain of European or Asiatic deer that would do well in the grassy plains area of the United States where native species confine themselves to the wooded sections.

I think the idea merits further study, but I would be opposed to any haphazard approach to this controversial subject. Rather, I would prefer to see the wildlife interests join together and initiate a program such as the Department of Agriculture has found so successful in its plant exploration activities during the past 50 years. I discussed this question with Mr. B. F. Morrison and Mr. C. O. Erlanson of the Division of Plant Exploration and Introduction of the Bureau of Plant Industry, and they tell me that much of the success of the plant introduction program can be traced to careful study of the plants in their native habitat before they were brought to the United States. Small, competent, scientific crews have traveled much of the world seeking new forms of plant life that might fit into American agricultural economy. That seems to me to be the common sense approach. The Near East and the Mediterranean are the original homes of many of our plants. Peru and Bolivia is another production center, while China and Ethiopia have proven to be so similar in temperature and climatic conditions that plants raised in these general areas have succeeded well in the United States. All of these areas prob-

ably also contain forms of wild birds and mammals that might be suited to our environment.

It would be my suggestion that the entire program be directed by a committee of outstanding authorities composed of administrators, biologists, and representatives of some of the zoological gardens who have had previous experience in this field. The Fish and Wildlife Service has no funds with which to carry on such activities, although there is authority in existing law to do so. This proposal would not cost any one state a great amount of money but by joining together, there could be secured information that should be of great value in future years. Certainly, this would be a better approach to the question of introducing exotics than to continue the hit and miss system that in the past has produced so many expensive failures and so little in the way of success.

I might add that this approach in reverse direction is already being applied. Many foreign countries, particularly in Latin America, are interested in importing North American species of fresh water fish. The Fish and Wildlife Service has consistently urged that such introductions be predicated upon a careful biological study of the local environment so as to give assurance that the newcomers will encounter favorable conditions, and will not overwhelm a desirable native fauna. Certain legislation permits the Service to cooperate with these other Nations in working out a problem of this nature. As exporters of wildlife, we are exhibiting more foresight than we have displayed as importers.

CARE OF THE GUN DOG—from Page 23

Exercise should be included in the summer care campaign of your dog. This is a double problem because it is too hot to allow the dog to run, and our laws prohibit it. Either let him swim at every opportunity or permit him to run around the yard in the cool of the evening while you watch him.

The summer diet for the dog should include more protein and less fats and carbohydrates. Less food will be needed in hot weather than in the cold winter months when he is so much more active. Reliable prepared foods on the market today greatly simplifies our summer feeding problems.

Be certain food is not left in the pan to become spoiled and later eaten with a fresh supply. During the summer it is better to feed twice each day, light in the morning and heavier in the evening. Do not overlook an opportunity to give him a good bone from the market, because it will help his teeth and give him something to work on during long warm hours.

Spend all the time you can with your hunting companion during this off season and he will surely know and appreciate your friendliness and care, and when the frosts come he will reward you with a superlative performance each time you take him in the field.

BULLET PERFORMANCE—from Page 23

The ideal seems to be a bullet that opens up to large diameter at any range where it might be used, but holds together to punch through bone and tissue. Modern bullets, such as the Remington-Peters "Core-Lokt" and the Winchester-Western "Silvertip" were designed to do this. The front third has a thin jacket that rolls back easily; the rear of the bullet has a thick jacket that holds it together.

The theory behind this bullet design is that the point will expand at any range, even after considerable velocity has been lost, while the rear portion will retain enough weight to give good penetration, even at close range. The manufacturers have succeeded remarkably well, in some calibers at least.

I shot an elk and a deer with a 270 last fall, using the 130-grain Silvertip bullet. This bullet had sufficient penetration to break both front shoulders on an elk at 260 yards, dropping it in its tracks. Yet the same bullet spread out to about the size of a nickel and stayed in a medium-size deer at 100 yards, even though it hit no bones.

I consider this just about perfect performance. While a bullet that goes on through an animal may leave a blood trail for easy tracking, one that stays in the body and sheds all its energy there, is, in my opinion, more likely to make tracking unnecessary. The bullet that goes clear through a deer expends much of its wallop in the earth beyond.

Of course, we all have seen freakish bullet performance. The old Western 46-grain open-point 220 Swift bullet would absolutely explode a chuck, yet I once shot completely through a buck at 125 yards with it. It mushroomed perfectly, but the base went on to punch a hole through the hide on the far side.

The following fall, I shot a buck with a 30-06, using the 180-grain soft-point bullet. It went to pieces on the shoulder bone on the near side. Only the base and some scraps of lead and copper reached the chest cavity, and I had to walk up and kill the deer with a neck shot.

Why do bullets sometimes behave like that? I doubt whether anybody knows. Funny things just happen. One thing for sure, you can't take the ballistics tables too literally. The 250 Savage, 257 Roberts and the 30-30 have approximately the same foot pounds energy at 100 yards with 100-grain bullets in the first two cartridges and the 170-grain bullet in the last. Yet the 250 and 257 in the hands of many hunters have proven themselves to be better killers than the 30-30. The lighter, faster bullet is more destructive than the slower, heavier one.

Of course, the rifle is important—no one could deny that. It must be accurate enough to place the bullet in a vital spot, but once the bullet reaches its target, the rifle and hunter have done their part. A clean kill then depends on whether the bullet was properly designed for its weight, velocity, the game and the range.



Left to right: The base of a 180-grain, soft-pointed 30-06 bullet that went to pieces in the shoulder of a deer at 100 yards; a 200-grain, soft-pointed 348 bullet that mushroomed very well in a deer at 200 yards; a 170-grain, soft-pointed 30-30 bullet that mushroomed perfectly in a goat at 60 yards; a 130-grain, Silvertip 270 bullet that mushroomed in dirt at 450 yards; a 130-grain, Silvertip 270 taken from a deer shot at 100 yards; an unfired 130-grain, Silvertip 270 bullet.

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violation occurred)

Cases Settled During the Month of January, 1949

PIKE—\$25.00		
Capone, Charles A., Jr., Shohola Falls. Possessing male ringneck pheasant taken in closed season	25.00	
POTTER—\$70.00		
Davis, Leroy B., R. D. 1, Roulette. Failure to take up trap at close of season	10.00	
Gilliland, Raymond, R. D. 2, Genessee. Failure to take up one trap at close of season	10.00	
Klesa, Robert W., E. Second St., Coudersport. Failure to visit trap within 36 hours	10.00	
Knickerbocker, Charles H., 13 Woodland Ave., Coudersport. Making false declaration of date in claim for bounty	10.00	
Mesler, William R., Shinglehouse. Failure to take up one trap at close of season	10.00	
Sherwood, Llewellyn W., Roulette. Failure to take up or spring two traps at close of season	20.00	
SNYDER—\$50.00		
Brubaker, Jacob L., R. D. 2, Port Trevorton. Aiding in the attempt to collect bounty on Red Fox unlawfully	25.00	
Nace, Roy Elwood, R. D. 1, McAlisterville. Dog chasing deer	25.00	
TIOGA—\$110.00		
Kenyon, Edward, R. D. 2, Middlebury Center. Killing a wild rabbit during closed season	10.00	
McLaughlin, Harold L., Roaring Branch. Possessing deer taken in close season	100.00	
WAYNE—\$35.00		
Kellogg, Harvey F., Star Route, Maplewood. Attempting to defraud the Commonwealth through the collection of bounty ..	25.00	
Lester, Frank M., Lookout. Giving false date of killing to secure bounty	10.00	
WYOMING—\$100.00		
Colbenson, Keith, 34 Maple St., Tunkhannock. Possessing part of an antlerless deer unlawfully taken	100.00	
YORK—\$170.00		
Bacon, Robert E., R. D. 1, Brogueville. Making a false affidavit in attempting to collect bounty on three gray fox, killed by another person	75.00	
Runkle, James F., R. D. 1, Windsor. Knowingly aiding and assisting in attempt to collect bounty on three red fox killed by another person	75.00	
Woodward, Milton, 131½ Railroad St., Hanover. Hunting without a license	20.00	
NONRESIDENTS—\$240.00		
Hazel, Walter S., 301 N. E. 77th St., Miami, Florida. Possessing loaded rifle in vehicle standing along highway	10.00	
Hinkle, Lester C., Hancock, Maryland. Hunting without non-resident license	50.00	
Lear, Thomas, 723 Lida St., Trenton, New Jersey. Failure to tag trap	10.00	
Snyder, Eldredge, 381 Park Ave., New York, N. Y. Hunting without nonresident license	50.00	
Stotler, Robert F., Box 175, Hancock, Maryland. Hunting without nonresident license	50.00	
Thompson, Robert E., 213 E. Henley St., Olean, N. Y. Failure to take up two traps at close of season	20.00	
Womble, Joseph S., Jr., 483 Columbus Ave., New York 24, N. Y. Hunting without nonresident license	50.00	

Cases Settled During the Month of February, 1949

ALLEGHENY—\$25.00		
Eyrolles, Jean R., 34 Curry Road, Broughton. Possessing loaded rifle in vehicle in motion on highway	25.00	
ARMSTRONG—\$150.00		
Crissman, John T., New Bethlehem. Setting trap closer than 25 ft. from beaver dam	50.00	
Crissman, Russell J., R. D. No. 2, Mayport. Setting trap closer than 25 ft. from beaver dam	50.00	
Crissman, William C., R. D. No. 2, Mayport. Setting trap closer than 25 ft. from beaver dam	50.00	
BEDFORD—\$10.00		
Claar, Thomas M., R. D. No. 1, Alum Bank. Falsifying date of red fox killing	10.00	
BERKS—\$45.00		
Breining, Lester P., R. D. No. 1, Hamburg. Making false affidavit to collect bounty on weasel	25.00	
Schwab, Isaac J., R. D. No. 2, Reading. Making false declaration of date to collect bounty on two weasels	20.00	
BRADFORD—\$610.00		
Belles, Elwood L., 213 North St., Athens. Setting two beaver traps closer than 25 ft. from beaver house; Attempting to take beaver in closed season	150.00	
Belles, George A., 213 North St., Athens. Setting two traps closer than 25 ft. from beaver house; Attempting to take beaver in closed season	150.00	
Brown, Willard A., R. D. No. 4, Troy. Failure to tag trap properly	10.00	
Cobb, Clifford E., R. D. No. 4, Towanda. Making false declaration of date on fox killed for bounty	10.00	
Johnson, Nathan T., R. D. No. 1, Sayre. Failure to tag traps above waterline set for beaver; Setting more than 10 traps for beaver	150.00	
Johnson, Theodore, R. D. No. 3, Wyalusing. Possessing parts of deer in closed season	100.00	
Vanderpool, James G., R. D. No. 6, Towanda. Possessing muskrat pelts during closed season	30.00	
Wilston, Harold D., R. D. No. 4, Troy. Failure to tag trap properly	10.00	
BUCKS—\$45.00		
Ciganick, Charles, R. D. No. 2, Doylestown. Making false declaration of date to collect bounty on fox	10.00	
Eichlin, Harry E., Box 126, New Hope. Making false declaration of date to collect bounty on one weasel	10.00	
Jett, Elmer Q., R. D. No. 1, Sellersville. Failure to report hunting accident within 72 hrs.	25.00	
CARBON—\$25.00		
Getz, Claude, Albrightsville. Dog chasing deer	25.00	
CENTRE—\$110.00		
Fohringer, Charles L., Centre Hall. Attempting to collect bounty on red fox in captivity	10.00	
Hough, Ray C., Rebersburg. Assisting to conceal doe deer unlawfully taken	100.00	
CHESTER—\$30.00		
McGowan, William L., R. D. No. 1, Parkesburg. Making false declaration of date to collect bounty on two foxes	20.00	
Miller, Raymond R., R. D. No. 1, Pottstown. Making false declaration of date to collect bounty on weasel	10.00	
CLINTON—\$110.00		
Maguire, William P., North Bend. Possessing loaded rifle in vehicle standing along highway	10.00	
Pelton, Edward, Westport. Possessing parts of deer unlawfully taken	100.00	
Schreffler, Jacob B., R. D. No. 1, Mill Hall. Attempting to collect bounty by making false affidavit	25 days	
CLEARFIELD—\$50.00		
Garvin, Miles M., Penfield. Failure to tag trap	10.00	
Kephart, Herman M., R. D., Osceola Mills. Declaring three false dates on Bounty Claims	30.00	
Maseto, Olive M., McGee Mills. Declaring false date on Bounty Claim	10.00	
CLINTON—\$110.00		
Barton, Charles N., Star Route, Lock Haven. Setting steel trap with jaw-spread exceeding 6½ in.	10.00	
Tyson, James E., Box 49, Castanea. Killing doe deer in closed season	100.00	
COLUMBIA—\$125.00		
Abraczinskas, Anthony A., R. D. No. 1, Catawissa. Making false affidavit in attempt to collect bounty	25.00	
Ent, Franklin A., R. D. No. 1, Nescopeck. Setting trap closer than 25 ft. from beaver house	50.00	
Messersmith, Paul D., 214 15th St., Berwick. Failure to tag beaver trap	50.00	
CUMBERLAND—\$10.00		
Burleson, Robert L., Summerdale. Failure to tag within one hour after killing	10.00	
DELAWARE—\$40.00		
Amato, John, 510 N. Plum St., Media. Failure to display license tag while hunting	20.00	
Noel, Dwight P., 338 W. 9th St., Chester. Killing crow from automobile	10.00	
Thomas, George B. Jr., Buck Road, Haverford. Training dog while carrying shotgun	10.00	
ELK—\$10.00		
Bayer, Paul I., Weedville. Failure to tag trap	10.00	
FRANKLIN—\$25.00		
Wenger, Glenn A., 319 S. 4th St., Chambersburg. Hunting game on Sunday	25.00	
JUNIATA—\$100.00		
Yohn, Robert M., Port Royal. Possessing deer taken in closed season	100.00	
LACKAWANNA—\$35.00		
Kellogg, Harvey F., Star Route, Maplewood. Attempting to defraud Commonwealth through bounty collection	25.00	
Krenitsky, Joseph, R. D. No. 1, Dalton. Making false declaration of date to collect bounty on weasel	10.00	

LANCASTER—\$50.00

Smoker, Maurice, R. D. No. 2, Narvon. Making false declaration of date to collect bounty of weasel and fox 20.00
 Ziemer, Noah E., Blue Ball. Making false declaration of date to collect bounty on three foxes 30.00

LEBANON—\$100.00

Gingrich, Paul L., R. D. No. 1, Myerstown. Attempting to kill antlerless deer in closed season 100.00

LEHIGH—\$10.00

Hoffman, William G., R. D. No. 1, Alburtis. Making false declaration of date to collect bounty on weasel 10.00

LUZERNE—\$1,420.00

Barry, George L., R. D. No. 1, White Haven. Setting steel trap for beaver with jaw-spread exceeding 6½ in. 50.00
 Briggs, Elmer E., 1050 Birkbeck St., Freeland. Aiding to defraud Commonwealth through collection of bounty 25.00
 Church, Kenneth R., Beach Haven. Attempting to take beaver over limit 50.00
 Evans, Michael, 1117 Cunnius St., Freeland. Attempting to trap three beavers 50.00
 Fassett, Reuben E., 116 Kado St., Wilkes-Barre. Failure to visit traps within 36 hours 10.00
 Flissner, Gordon L., 435 Center St., Freeland. Issuing hunter's license without satisfactory identification 20.00
 Hardisky, Frank A., Star Route, Dallas. Setting trap closer than 25 ft. from beaver house 50.00
 Jones, Edward M., R. D. No. 1, Mountain Top. Setting trap closer than 25 ft. from beaver house 50.00
 Kish, Emory J., 927 Birkbeck St., Freeland. Attempting to defraud Commonwealth through collection of bounty 25.00
 Kramer, William P., Beach Haven. Failure to display license tag while hunting 20.00
 Martisofski, Daniel R., R. D., Sugarloaf. Making false declaration of bounty date 10.00
 Medve, Andrew, No. 8 Minden Place, Parsons. Failure to keep trap tag above waterline while trapping beaver 50.00
 Miller, George, R. D. No. 2, Wilkes-Barre. Dog chasing rabbits, unaccompanied by owner 10.00
 Mitchell, Alfred, 37 W. Market St., Wilkes-Barre. Setting beaver trap within 25 ft. of beaver dam 50.00
 Roberts, Walter R., R. D. No. 1, Mountain Top. Setting trap within 25 ft. of beaver house 50.00
 Rhodes, Edwin J., Main St., Shavertown. Failure to keep tags above waterline while trapping beaver 50.00
 Sheptoski, Walter J., 135 Railroad St., Glen Lyon. Setting Steel trap for beaver with jawspread exceeding 6½ in. 50.00
 Wells, Franklin C., R. D. No. 1, Pittston. Attempting to defraud Commonwealth through collection of bounty 50.00
 Wrubey, Raymond W., 600 Winters Ave., W. Hazleton. Failure to keep tag above waterline while trapping beaver 50.00
 Yenkevich, Gustie, R. D. Sugarloaf. Setting steel trap for beaver with jawspread exceeding 6½ in. 50.00
 Yurish, Paul, 417 Park St., Freeland. Setting beaver trap with tag below waterline 50.00
 Zacher, Ira W., 34 E. 1st St., Hazleton. Setting steel trap for beaver with jawspread exceeding 6½ in. 50.00
 Zondle, Michael P., R. D. No. 2, Avoca. Setting traps within 25 ft. of beaver dam 50.00

LYCOMING—\$525.00

Dunlap, William J., R. D. No. 2, Jersey Shore. Possessing parts of doe deer killed in closed season 100.00
 Miller, Robert D., R. D. No. 2, Jersey Shore. Possessing parts of doe deer killed in closed season 100.00
 Saylor, Glen H., 533 Seventh Ave., Williamsport. Aiding in possession and concealment of three deer in closed season 300.00
 Struzik, Frank, Roaring Branch. Alien possessing firearms 25.00

McKEAN—\$30.00

Shaffer, Harry F., R. D. No. 1, Eldred. Declaring false date on bounty claim 10.00
 Unverdorben, Fred E., R. D. No. 1, Eldred. Declaring two false dates on bounty claim 20.00

MONROE—\$617.00

Cobb, Laverne S., Pocono Summit. Setting trap closer than 25 ft. from beaver house 50.00
 Freeman, Milton A., 173 Meyers St., E. Stroudsburg. Possessing parts of doe deer taken in closed season 100.00
 Johnson, Amos I., Readers. Possessing parts of deer beyond close of season 50.00
 Krummell, John F., Canadensis. Setting trap closer than 25 ft. from beaver house 50.00
 Martz, Fred J., 194 Elizabeth St., E. Stroudsburg. Possessing parts of doe deer in closed season 100.00
 Metzgar, Charles P., 145 W. Broad St., E. Stroudsburg. Taking three muskrats in closed season; Setting steel trap for beaver with jawspread exceeding 6½ in. 80.00
 Rinker, Kermit B., Readers. Failure to report big game kill; Failure to tag deer before transporting 27.00
 Rinker, Martin R., Readers. Possessing parts of deer after close of season 50.00
 Slack, Ralph L., 173 Meyers St., E. Stroudsburg. Killing doe deer in closed season 100.00
 Teisher, John, 219 E. Brown St., E. Stroudsburg. Failure to visit fox trap within 36 hours 10.00

MONTGOMERY—\$55.00

Clugston, Ira F., 34 N. Market St., Hatfield. Disturbing trap of another 25.00
 Collins, Joe L., Road A., 34 B. Pottstown. Dog chasing small game in closed season 10.00
 Hollman, Charles, Huntingdon Valley. Attempting to kill rabbit in closed season 10.00
 Robinson, Kelso J., Jr., 732 Harrison Ave., Ardsley, Glenside. Failure to tag trap 10.00

NORTHAMPTON—\$75.00

Green, Ralph J., 27 Belvidere St., Nazareth. Making false affidavit in attempt to collect bounty on fox 25.00
 Schweitzer, Edgar E., Ackermanville. Setting beaver trap less than 25 ft. from beaver house 50.00

PHILADELPHIA—\$10.00

Alfano, James, Jr., 1240 S. 11th St., Phila. Killing protected bird 10.00

PIKE—\$75.00

Roloson, Leroy, Lords Valley. Setting trap on beaver house 50.00
 Shook, Harry A., Jr., Star Route, Hawley. Attempting to defraud Commonwealth by collection of bounty 25.00

POTTER—\$445.00

Ahearn, Charles, Coudersport. Assisting to take three deer over limit 300.00
 Dunmire, Robert F., R. D. No. 1, Vandergrift. Shooting within 150 yds. of occupied buildings 25.00
 Hicks, Russell C., R. D. No. 3, Coudersport. Possessing parts of antlerless deer unlawfully taken 100.00
 Ingalls, Alanson F., Roulette. Failure to take up trap at close of season 10.00
 Kowalski, Stanley J., R. D. No. 3, Coudersport. Failure to tag trap 10.00

SCHUYLKILL—\$75.00

Artz, Claire W., Hegins. Setting trap closer than 25 ft. from beaver dam 50.00
 Schaeffer, Francis, Hotel Orwigsburg, Orwigsburg. Hunting within 150 yds. of occupied building 25.00

SULLIVAN—\$60.00

Gutosky, Adam R., Lopez. Failure to tag trap 10.00
 Rokus, Stanley F., Mildred. Setting beaver trap 21 ft. from water line of beaver house 50.00

SUSQUEHANNA—\$70.00

Coons, Lafor F., R. D. No. 1, Susquehanna. Attempting to defraud Commonwealth through collection of bounty 25.00
 Wenzel, Robert L., R. D. No. 4, Susquehanna. Attempting to defraud Commonwealth through collection of bounty 25.00
 Yeomans, Phil, Kingsley. Making false declaration to collect bounty on two weasels 20.00

TIOGA—\$20.00

Johnson, Ralph E., Box 164, Tioga. Taking muskrat in closed season 10.00
 Wagaman, William A., R. D. 4, Wellsboro. Making false declaration of date to collect bounty 10.00

WASHINGTON—\$50.00

Brice, Arthur E., 906 Oak St., Marianna. Setting trap within 25 ft. of beaver dam 50.00

WAYNE—\$120.00

Cominsky, Felix, Lakewood, R. D. Setting more than 10 traps for 12 beaver 100.00
 (Unable to pay fine, committed to jail for 104 days)
 Dressler, Andrew, South Sterling. Shooting at unprotected target in big game season 10.00
 Kellam, Floyd W., Equinunk. Giving false date of killing to secure bounty 10.00

WYOMING—\$10.00

Smith, Paul W., R. D. No. 2, Laceyville. Failure to tag trap 10.00

YORK—\$20.00

Sterner, Roy C., R. D. No. 1, Glen Rock. Making false declaration of date to collect bounty on fox and weasel 20.00

NON-RESIDENT—\$790.00

Austin, Raymond M., 91 Foster Rd., Princess Bay, Staten Island, N. Y. Hunting without non-resident license; Making false statement to secure hunting license 70.00
 Burnham, James H., R. D. No. 2, Wellsburg, N. Y. Failure to tag trap properly 10.00
 Campbell, Donald W., R. D. No. 2, Wellsburg, N. Y. Failure to tag trap properly 10.00
 Criddle, Sidney R., R. D., Deposit, N. Y. Attempting to defraud Commonwealth by collection of bounty on four foxes 100.00
 Madden, Daniel J., 413 East 142nd St., Bronx, N. Y. Possessing deer in closed season; Transporting illegally killed deer out of state 200.00
 Mulligan, John P., 473 E. 143rd Street, Bronx, N. Y. Possessing parts of deer in closed season 100.00
 Sullivan, Patrick M., 411 E. 142nd St., Bronx, N. Y. Illegally transporting deer killed in closed season; Killing deer in closed season with gun propelling more than one ball at single discharge 300.00

Cases Settled During the Month of October, 1948**LAWRENCE—\$160.00**

Cunningham, Dale A., R. D. 1, New Castle. Shooting wild ducks after closing hour 15.00
 Cummings, James H., 435 Winter Ave., New Castle. Shooting at wild ducks after closing hour 15.00
 Funk, Ralph R., New Wilmington. Shooting at wild ducks after closing hour 15.00
 Fordney, Theodore G., 512 W. Neshannock Ave., New Wilmington. Shooting at protected birds (blackbirds) 10.00
 Gross, Kenneth E., 420 Hazel Ave., Elwood City. Shooting at wild ducks after closing hour 15.00
 Hartzell, LaMoine B., 2031 Perry St., Elwood City. Shooting at wild ducks after closing hour 15.00
 Marinaccio, Julius, 238 Hazel Ave., Ellwood City. Entering a State Game Refuge in open game season 25.00
 Plotts, Wendell L., North Market St., New Wilmington. Entering a State Game Refuge in open game season 25.00
 Torner, Clinton B., R. D. 2, Portersville. Destroying shrubs on State Game Lands 25.00

Cases Settled During the Month of November, 1948**BUTLER—\$260.00**

Baughman, Nelson M., R. D. 1, Renfrew. Possessing rabbit unlawfully taken 10.00
 Burd, C. William, R. D. 2, Cabot. Hunting without resident license 20.00
 Douthett, Claire B., Conoquenessing. Hunting rabbits between 5 p. m. and 7 a. m. 15.00
 Dunlap, Thomas, Chicora. Hunting within 150 yards of occupied building 25.00
 Funkhouser, Morris N., R. D. 6, Butler. Shooting at unprotected target in big game season 10.00
 Galisin, Michael, 129 Homewood Ave., Butler. Shooting at wild ducks after closing hour 15.00
 Geibel, Paul, R. D. 3, Butler. Shooting at unprotected target in big game season 10.00
 Gates, William L., R. D. 6, Butler. Shooting at unprotected target in big game season 10.00
 Lechner, George E., R. D. 1, Portersville. Possessing deer more than 60 days after close of season 50.00
 Molinaro, Joe, R. D. 2, Valencia. Shooting at unprotected target in big game season 10.00

Murdick, Dale E., R. D. 1, Fenelton. Shooting at unprotected target in big game season	10.00
Stevenson, Mayne B., Conoquenessing. Hunting without non-resident license	50.00
Tritch, Delmont B., Karns City. Shooting within 150 yards of occupied building	25.00
Winters, Richard J., R. D. 6, Butler. Shooting at target more than 200 yards from headquarters in big game season	10.00
CLARION—\$415.00	
Benninger, Raymond W., Knox. Hunting without resident license	20.00
Beck, Raymond J., R. D. 3, Knox. Possessing one muskrat pelt in closed season	10.00
Carson, Charles H., Fairmont City. Hunting before opening hour first day	15.00

Ditty, Clifton W., Heuy. Hunting before opening hour first day ..	15.00
Ditty, Arnold E., Fairmont City. Hunting before opening hour first day	15.00
Ditty, Irwin L., Fairmont City. Hunting before opening hour first day	15.00
Downing, James W., R. D. 2, Lucinda. Possessing deer unlawfully killed	100.00
Heeter, Floyd R., R D 2, Lucinda. Transporting deer unlawfully killed	100.00
Kemery, Walter W., Rimersburg. Possessing loaded rifle in vehicle standing along highway	10.00
Radaker, Robert G., Fairmont City. Hunting before opening hour first day	15.00
Snyder, Richard M., Hawthorn. Possessing parts of deer in closed season	100.00

AN AWAKENED MORAL CONSCIOUSNESS—from Page 10

instructional staff, and financial assistance. Participating organizations include the Pennsylvania Department of Public Instruction, the Department of Forests and Waters, the Department of Agriculture, the State Planning Board, the State Game Commission, the State Fish Commission, and the Department of Mines.

Among other agencies concerned with the field of Conservation of natural resources who have been instrumental in developing the Laboratory project are the Frick Educational Commission, the Pennsylvania State Education Association, the Pennsylvania Federation of Women's Clubs, the Pennsylvania Federation of Sportsmen's Clubs, the Pennsylvania Forestry Association, The Izaak Walton League, the Conservation Council of Pennsylvania, the Pennsylvania Roadside Council, the Pennsylvania Conservation Committee, the Garden Club Federation of Pennsylvania, Friends of the Land, the Pennsylvania Parks Association, the National Audubon Society, the Pennsylvania Academy of Natural Science, the Schuylkill River Valley Restoration Association, the Pocono Forestry Association, the Richfield Community Club, the Phila-

delphia Inquirer, Garden Clubs of American, the Horseshoe Trail Association, the Laceyville Rotary Club, and the Potato Creek Conservation Club.

The United States Soil Conservation Service and the United States Forestry Service have offered consultation service. The Schools of Agriculture, Education, and Mineral Industries at The Pennsylvania State College will provide much of the instruction.

The next generation must accordingly be taught to contribute to the sum total of Nature's resources—to conserve them, not to waste and despoil them. This fundamental philosophy can be taught as any other subject in the curriculum is taught; and it will be taught better if teachers are better prepared. The education of teachers in the field of Conservation is a step toward achieving the right attitude of mind in the whole-hearted and far-sighted endeavor to conserve the moral, spiritual and physical resources of this generation. The transmission of this attitude to each succeeding generation is a challenge—a challenge that is the awakening of moral consciousness.

A WATERFOWL PROGRAM—from Page 11

Ducks Unlimited:

1. To carry on wherever possible recommended management work in the Flyway.
2. To undertake needed field studies wherever possible in the Flyway.
3. To promote public understanding and cooperation in the program.

States and Provinces:

1. To promote public understanding and cooperation in the program.
2. To promote management work by private agencies and individuals.
3. To cooperate with the Service in fall censuses, winter inventories, and appraisals of the kill.
4. To carry out recommended studies to secure additional information needed.
5. To put into practice management suggestions as they are developed.

ANSWERS TO WHAT'S WRONG

1. A Leach's petrel is an ocean bird. It would not occur on the western plains with a bison.
2. Jumping mice are one of the "Seven Sleepers." They hibernate in winter.
3. Barred owls nest in a tree cavity but their eggs, as are all those of owls, are pure white and unspotted.
4. California quail have a drooping, tear-shaped plume, rising from their crown.

ABOUT THE CARTOONIST



tionally famous cartoonist of the Pittsburgh Post-Gazette.

Mr. Hungerford was born on a farm near Rushville, Indiana and started newspaper cartooning as a grade-school boy in Parkesburg, West Virginia. He has been editorial cartoonist for the Post-Gazette since 1927 and has been sent on cartooning assignments to England, Europe, the West Indies, Mexico, and South America. He recently spent three months in England, Belgium, Germany, France, Greece, and Italy sending back cartoons on life in those countries. He has been given an honorary degree of Doctor of Arts by Washington & Jefferson College and also holds the "Headliners" award for national cartooning in 1947.

Cy Hungerford has done a little bit of everything in the cartoon field, covering conventions, World Series, heavyweight championship fights, comic strips, the coronation ceremonies in London in 1937, and now will cover the "hunting scene" for the GAME NEWS. Watch for his brilliant cartoon observations in future issues.

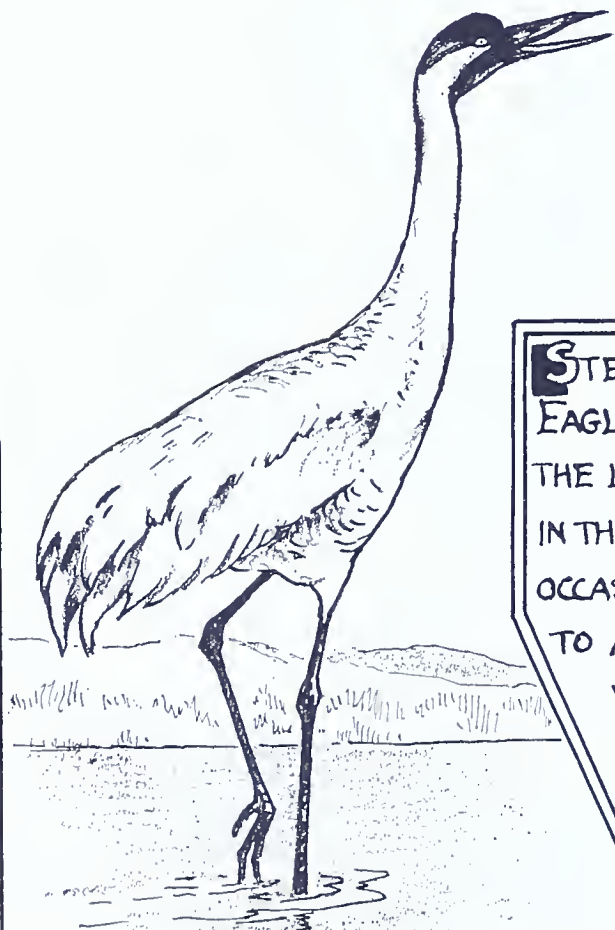
The full-page cartoon on the opposite page, first in a new series of GAME NEWS features, will be easily recognized by many of our readers as the work of Cy Hungerford, interna-

WHAT THE HUNTERS EXPECT

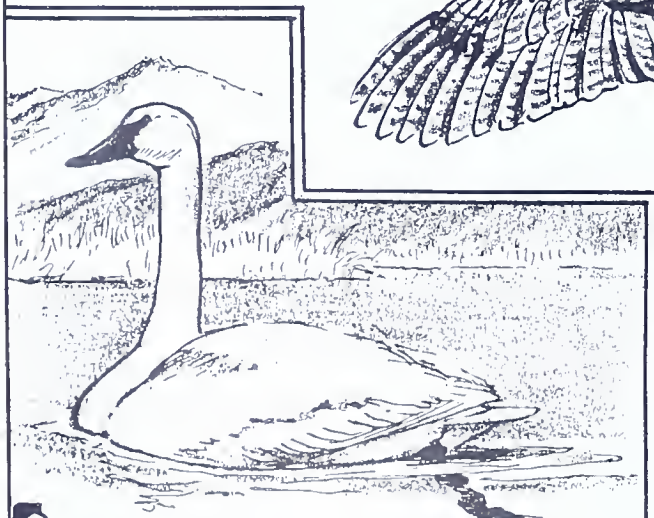


LARGEST AND SMALLEST LAND BIRDS OF NORTH AMERICA

WHOOPING CRANE,
STANDS ABOUT
5 FEET HIGH.
FORMERLY BRED
FROM SASKATCHEWAN
TO IOWA —
IN 1949 ONLY ♀

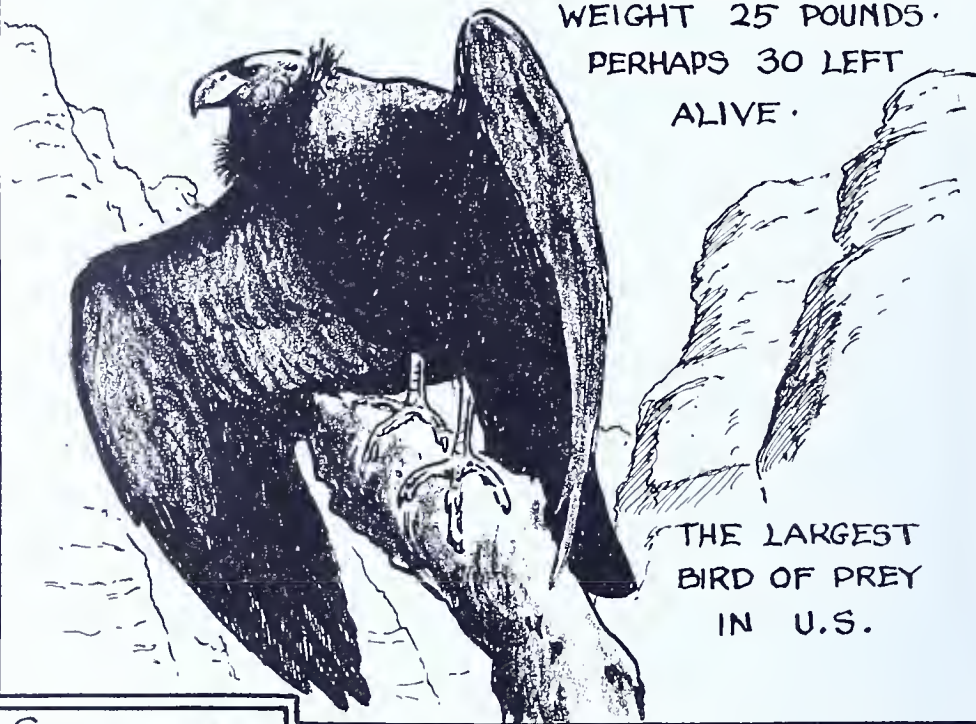


ABOUT 20 WHOOPERS WERE
KNOWN TO BE ALIVE IN THE
UNITED STATES.



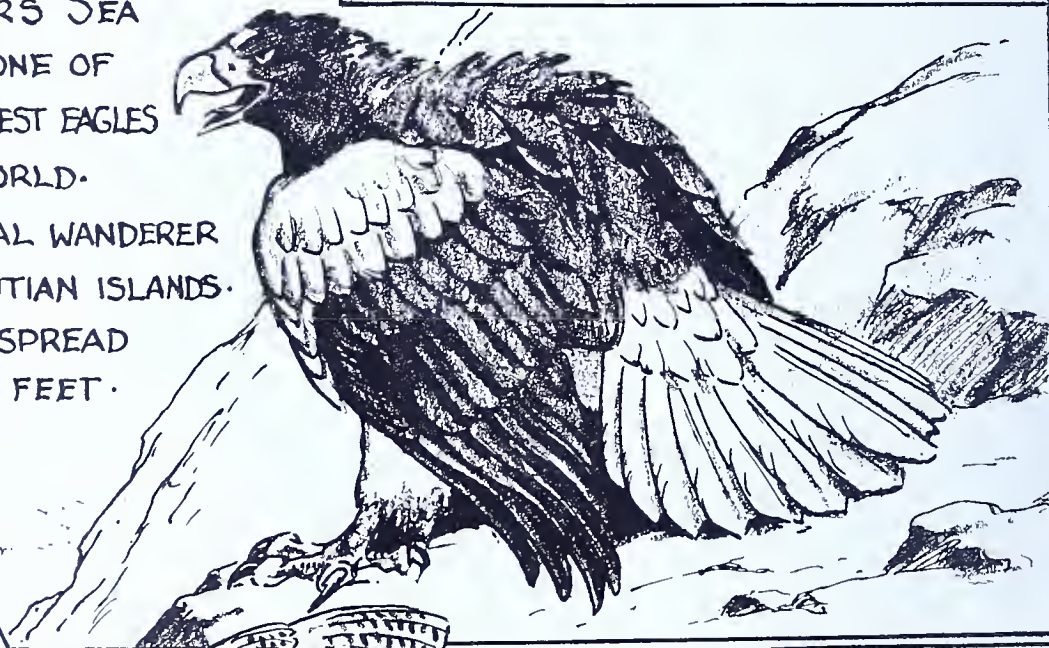
ONE OF OUR LARGEST NATIVE BIRDS —
TRUMPETER SWAN — 30 POUNDS.
ALMOST EXTINCT 10 YEARS AGO,
THERE ARE NOW OVER 400 IN U.S., CHIEFLY IN WYOMING.

CALIFORNIA CONDOR — WINGSPREAD 11 FT.
WEIGHT 25 POUNDS.
PERHAPS 30 LEFT
ALIVE.

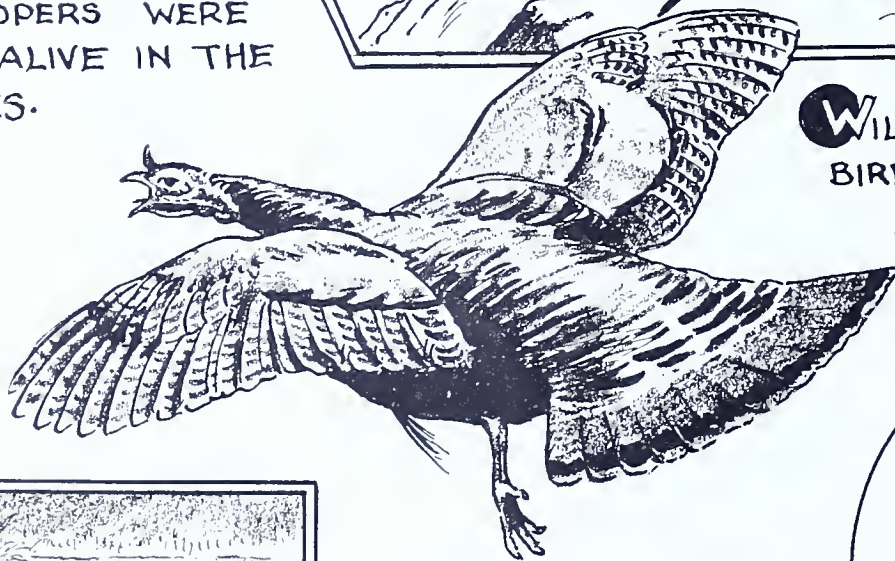


THE LARGEST
BIRD OF PREY
IN U.S.

STELLER'S SEA
EAGLE — ONE OF
THE LARGEST EAGLES
IN THE WORLD.
OCCASIONAL WANDERER
TO ALEUTIAN ISLANDS.
WINGSPREAD
8 FEET.



WILD TURKEY, KING OF GAME
BIRDS. GOES TO OVER
30 LBS.



HELENA'S HUMMINGBIRD,
IN CUBA, IS THE SMALLEST
BIRD IN THE WORLD.
LENGTH $2\frac{1}{2}$ INCHES.

JACOB
BATES
ABBOTT
1949



BREEDS IN FAR WESTERN MOUNTAINS.

SMALLEST BIRD IN U.S.
LENGTH 3 INCHES.

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DEATH COMES TO A TREE

I AM a tree whose green head reached high into the sky yesterday.

Today, my head is still high, but it is no longer green.

Where once I looked out over a bed of solid green, today as far as I can see, from my great height to the horizon, everything is black and desolate and dead. I, too, will soon be dead.

Never again will I be gladdened by the songs of birds, the soft whisperings of the wind, the homey chirpings of the crickets, the sudden rustlings of the grouse in the leaves about my feet. Never again will sulphur butterflies chase each other up shafts of sunlight through my arms, nor the "thump-thump" of a rabbit's feet be heard on moonlit paths.

My sisters, my brothers and I were born about seventy-five years ago. Seventy-five times we have seen the seasons come and go. Seventy-five times we have seen the birds fly south and return to nest and raise their young. Nearly thirty thousand times we have seen the sun settle down in the green bed we made for it. Tonight, though, it passed slowly, and sorrowfully I know, through the charred sticks that yesterday were living trees.

Soon I, too, will be dead. Soon, I hope, because I want to forget the tragedy of yesterday. I want to forget that little black lump on the hot floor around my feet, where the mother grouse died, with her wings covering her little ones. I want to forget the terror in the eyes of the deer, urging her twins to move faster on their weak legs. I want to forget the old poplar with its nest of noisy young woodpeckers. I want to forget the bear hurrying along on burnt feet, the lumbering skunks and the squirrels in my arms chattering with fear as the raging, crackling flame swept over me and them. I want to forget the sounds that no human has ever heard, because no human could live to tell of what happens in the heart of a forest fire.

I wish, Mr. Camper, that you could have seen and heard the terrible tragedy you unleashed when you tossed your cigarette butt alongside the trail yesterday as you left for home. We saw it fall among the dry leaves. Helplessly

we watched it smoulder. We saw a blade of dead grass flare up and die, then another and another, and we hoped. We saw a dry leaf writhe and smoulder beneath the cigarette, we saw the smoke grow thicker.

In the distance, we heard a young human laugh and say, "It was a swell day, Dad. I hope we come back here next year." A door slammed, an engine roared and purred off toward the city, many miles away.

You and your family slept well last night, Mr. Camper. Thousands of trees made your vacation a pleasant one. They gave you the peace you sought for jangled nerves. Gave you the flowers, the deer you saw in the view finder

of your camera. They gave you the lake, and the fish you took home. Gave you shade and moss-covered ground for rest. Gave you the song of a bird, beauty and color and relaxation.

In return for all those gifts we gave you, you destroyed us, thousands of us who were the home of Nature's children; and you destroyed her children. You turned thousands of living trees into blackened monuments—monuments to your carelessness with fire. One lighted cigarette butt destroyed us!—Reprinted from an article by R. V. Whelan in *Sylva*, Vol. 4, No. 6, published by the Department of Lands and Forests of Ontario.



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PRINCE OF PESTS*

By PAUL H. FLUCK

The Fox Gets the Blame,

While the Cat Gets the Game

THE gravel of the Alcan Highway splattered against our fenders. We fixed our eyes dead ahead as we looked for bears and moose in the half darkness of the arctic night. Here and there the eyes of an arctic fox sparkled like a pair of amethysts in the brush piles. Enormous mothlike arctic horned owls fluttered about in the headlights as they pursued scampering pack rats and Parka squirrels across the highway. There, what was that?

A slinking black fantasy jumped from a tree stump and disappeared into the bushes. We spun our spotlight after it, while our hearts pounded as we strained our eyes to see our first wolverine. There it was. Huge fiery eyes glared at our spotlight. But that was no wolverine; that snaky tail belonged to an ordinary tomcat of the Eastern alleys. That was only the first of many cats that we saw along the Alcan Highway. This purring, pampered predator, the protege of man (the worst predator of all), has arrived to tear up ptarmigan chicks in the same ruthless manner in which he has destroyed

* Reprinted from the August Country Gentleman, courtesy of the Editors, copyrighted 1948, The Curtis Publishing Company.

the quail of this nation. With man, the cat and the rat have advanced to the corners of the earth to wreak equal havoc.

Not far from Pennington, New Jersey, less than thirty years ago, I used to lie awake early on spring mornings and peep at the rising sun through a crack in the canvas of my pup tent, while the whistles of bobwhites rang from every side. Today, active bird banding has me abroad in the fields much of the time. I know of only a single pair of bobwhites that nested near there last season. The bobwhite chicks of Central New Jersey have fattened countless cats, and the whistles of the cheerful quail will never again reverberate on June mornings. Cats are here to stay; the quail are gone forever.

The cat problem stems directly from the mushiness of the human mind. We can't bear to destroy kittens. The dear little things . . . how cute they cuddle on their pillows. But unfortunately, as they mature, these half-grown killers are left to shift for themselves. They shift all right, and we have little need to worry. Few cats starve. Cardinals, juncos, and titmice supplement the rabbit diet of the winter months for puss. She is sleek and fat when she proudly leads her latest quintuplets into our home in the springtime. She purrs contentedly while we stroke her and compliment her on the fine job of ratting she has done through the winter. But the rats have had little to fear from puss. They, too, have reinforced their numbers during the winter months, for puss spurns their leathery bodies. Why eat tough rats when cardinal dinners are on the menu?

It is a finable offense to abandon cats in some states, and there are a few places where this law is vigorously enforced. But in much of the country, as along the Alcan Highway, the cat is looked upon as a benefactor. This princely pest is welcomed in our households. We chase him to take a mangled bird on rare occasions, and admonish him for it, but we are certain that, without the cat's assistance, rats and mice would overrun our houses.

Let's look into this mousing and ratting proposition. Let's see if the prince of pests is worth his princely tribute. Let's see if the benefits of the cat outweigh the loss of our quail, the loss of our meadow larks, and the drain on our rabbit and pheasant populations. Just how many rats and mice does the average cat actually catch?

Frankly, the average cat catches far less than a single rat or mouse each day. Compare this with the owl that must catch six at least if it is to continue living. At times, some unusual cat develops a truly unusual appetite for rodents or discovers the nest of a field mouse. It proudly lays the entire family of baby mice at our feet as a tribute for the princely feasts we have provided. What a cat! Our cat caught six mice in a single day!

Watch puss, watch her as she leaves at dusk to make her evening rounds. Does she head for the barn, or the chicken house, or toward the rubbish pile where we know the rats have their apartments? No, she makes a beeline for the hedges, or the high grass along the roadside. But puss should know; puss knows more about rats than we do.



Follow puss; follow her closely if you are able, through the dewy grass on a May evening. Ah, she stops. She sniffs the air. She almost glides along in the hedges. She reaches into the low branches, and we hear a startled chirp and the beating of wings. Turn your flashlight on this evil perpetration. There, in the full light you will discover that a catbird or a song sparrow has just lost its home and family. Indeed, the proud mother herself may be thrashing about with a broken wing. Puss is leisurely going about the enjoyable business of making calories, cat calories, out of one of our most efficient insect eaters.

One helpless invalid told me that a single cat dumped the nests of nine catbirds in one evening, while she sat unable to interfere. Puss is a purring, loving creature as she curls upon our laps, but she is the most vicious and cruel killer with which Nature has ever had to cope.

Most of us don't possess sufficient scientific interest to drive us, like Pasteur, into the mouths of mad dogs, or into the stomachs of foxes and cats. I have performed autopsies on the entrails of twenty-one foxes that one of my friends, the local expert trapper, provided. Carefully, with a microscope, I have examined the contents of fox stomachs, and I have yet to find the evidence of one pinfeather. It is quite true that a fox, feeding a litter of young, might use a farmer's chicken house as a delicatessen. It is also true that a fox might take a wounded duck, or a starving pheasant, when he himself is starving. But the fox stomachs I examined, many in the dead of winter, have contained a large proportion of mouse and rat ingredients, with beetles and even berries or grapes being found in a few. A fox is a superb mouser, and as a ratter only the hawks and owls are his equals.

Now, I'll give you the low-down on some undercover autopsies performed beneath the shaded lights in my cellar. As a bird bander, I am constantly troubled by pesky cats which use my bird-feeding stations as a restaurant. Waste few tears on these bandits. Though sleek of fur, they are the cruellest torturers among the four-legged creatures that plod this planet. One day, I lost a race to a big black cat that dashed into the bushes with my gorgeous male cardinal. On the next day, I caught the same villain in my clover-leaf trap with the female cardinal in his clutches. Needless to say, that autopsy was not an occasion for tears or misgiving. And, needless to say, there was ample stomach evidence to convict this murderer posthumously.

I have picked up a few fresh cat carcasses from the city streets as well as in the country, and I have yet to report on a single stomach empty of pinfeathers, in the summer or the winter. Twice there was the unmistakable evidence of mice being present; but, aside from a liberal quantity of table groceries, I have nothing else to report. Autopsies on cats have borne out my feelings. Cats are not mousers, or ratters, by preference; cats are inclined toward the white meat on the menu.

For those who would like to examine these gruesome records, I have them all, duly tabulated and dated. Take my word for it; when pheasants and rabbits don't come up to specifications, and when the bobwhites vanish from your hunting lands, look for cats, not the foxes.

Man, it is true, is responsible for much of this destruction. But man has attempted to restock the game lands he has pilfered. Never, in its primitive state, did this country possess the food supplies for quail that exist today in the form of oat, rye and wheat

(Continued on Page 25)



OUTDOOR KIDS

By HAL HARRISON

"BILLY! Billy, wait for me! I have news for you. It was Jane, with Pal running at her side, hurrying across the yard.

Her brother waited reluctantly, for he was not at all sure that what a girl Jane's age considered news was important.

"Guess what!" was Jane's greeting as she caught up. "I give up," Billy answered impatiently.

"Well, smarty, a very good friend of yours is back, and what's more he has his wife with him and they are already keeping house," Jane announced tossing her head confidently.

"Jane, what in the world are you talking about?" her brother asked.

"I'm talking about Mr. and Mrs. Beep, that's who," she replied.

Sudden light dawned on Billy. "You mean the old crested flycatcher is back? How do you know?"

"Mrs. Kirk just told me. And where do you think they're nesting?" Jane continued.

"In No. 20, of course," was Billy's quick answer.

"How did you know?" Jane looked puzzled.

"My child," Billy began, drawing himself up to his full four feet ten inches, "you may be interested to know that the crested flycatchers have occupied Box No. 20 in the Kirk yard for 14 years."

"In that case, they nested there one year before you were born, so how do you know?" Jane queried.

"Mr. Kirk told me all about it after you and I cleaned the nest box for him last fall. The first year he started to band birds, the flycatchers nested in that same place. It was a different box then, but it was in the same location. They have returned every year since, but it has not always been the same male or female," Billy stated.

"Who named him Mr. Beep?" Jane asked.

"I think Mrs. Kirk did," Billy informed her. "When she first heard that shrill, whistled call, it sounded like 'beep, beep, beep, beep' to her, so she named him Mr. Beep. But what are we waiting for? Let's go say 'hello.'"

Billy started off toward the Kirk home, hidden deep in a big yard of trees, shrubs and vines making it an ideal place for wild birds. Jane and Pal followed. They were soon standing quietly in the background watching Box No. 20, fastened to the trunk of a wild cherry tree, 12 feet above the ground.

Suddenly, from behind them, came the shrill call of "beep." They turned, and there sitting on the top of a dead stub was a large flycatcher with a gray throat and breast, a sulphur-yellow belly and a cinnamon-colored tail fanned below him. His crest was slightly raised as he peered at the children and their dog quizzically.

Spotting a passing insect, the flycatcher dashed into the air, snapped the luckless bug with a "click" of his broad, flat bill, and sailed back to his perch.

"There's Mrs. Beep," Jane cried as the second flycatcher sailed into view. "Look, she has nesting material and she is going in No. 20," she added excitedly.

"I wonder if she has put a snakeskin in there yet," said Billy. "That was sure a big one that we found inside the box last fall."

"But, Billy, they don't always use a snakeskin, even if people say they do. Pop told us that sometimes they use onion skins, waxed paper or strips of cellophane instead," Jane reminded her brother.

"Yes, and pop says he doesn't believe that old idea that the crested flycatcher uses a snakeskin to scare off enemies. He says that a bird does not have intelligence enough to know in advance that a snakeskin might scare some enemy that might attack at some future date," contributed Billy.

"And you know something else, Billy? The snake-skin that we found last fall was so deeply buried among the twigs and feathers that an enemy could not even see it in that dark box. I don't believe the snakeskin is used as a 'scarecrow' either," concluded Jane.

Does ain't Deer!

by
Durward L. Allen



Reprinted by Special Permission from *Sports Afield*, December, 1948

IT CAME on Christmas night, and it was the kind of snow Grandpa used to tell about. It sifted down into Manhattan and stopped a lot of what goes on there. Game administrators in the Northeast stood by their radios and shook their heads. The deer would be yarding up. It was one of those winters.

Much as you and I, deer want company when things get rough. Storms and bellydeep snow give them the old urge. Western deer move down-country from ridges to the foothills. Northern bands collect in sheltered stream bottoms and cedar swamps. They tramp out a maze of paths, and there they stay until spring thaws liberate them.

Typically, these "yards" harbor animals from a large summer range. The pinch comes when deer are many and severe weather is prolonged. The food supply—buds, twigs and leaves—is scant already from many a winter of nibbling. It gives out. The result is dead fawns, waste and headaches.

Last fall the nation's hunters took well over half a million deer—probably the largest crop in history. But authorities warn that this, or one soon to come, may be the largest we will ever get.

The trouble? It's the same in 30 states: We are holding our herds at too high a level and letting them ruin winter ranges by overbrowsing. At the same time, a good big slice of what should be our harvest goes to waste.

Big-game specialists have a ready answer to this: Kill more deer! Reduce the herds to what winter forage will support. And bucks—only won't do it. Does and fawns must be taken in many areas, and regularly, if the situation is to be controlled. Well, why not?

It could be done—except for the well-meant opposition of a host of people who have not yet recognized the issue: Shoot them and use them . . . or let them starve. But even more serious is the long-time consequence if we stick with the escapists. One after another, wintering areas are being depleted of nourishing and palatable foods. Inferior browse plants are replacing the good ones. That means a well-nigh permanent reduction of the capacity of the range to support deer.

Brethren, the by-and-by will not be half so sweet if we don't handle this—and soon.

It's not hard to see how people look at it: Deer are big game to half a million hunters. They know a good thing and don't want to take chances. As for the resort owner, he can hardly conceive of too many deer. They are his best window dressing. The public at large hardly knows that an issue exists. They push neither this way nor that; but they will go along with the old timer who waggles his finger beneath the nose of science and proclaims, "Any man that would shoot a fawn is no sportsman! And does just ain't deer!"

Time was when this idea worked for us. Deer were a staple food for the early settler—the year around. They became locally scarce and were the first species to be protected by a closed season—just 26 years after Myles Standish and friend Priscilla walked ashore at Plymouth Rock. The lumberman waded into dense forests that had never supported many deer, and he changed it into cutover brushland in which they thrived and multiplied. Then fires ruined large areas of range. Where brush and forest edges persisted, the market hunter was active. He killed for lumber camps, and he sent tons of vension



The prolific doe. Her first fawn is a singleton, but later on it's twins or triplets. Fully protected, a few deer will soon overpopulate an area. Rigid buck laws are outmoded.



A ruined range means fewer deer in years ahead. This spray of laurel, ordinarily only a starvation plant food in Pennsylvania, has been browsed heavily.



Today's big deer issue is a far cry from the old one. It's "Shoot them and use them or let them starve." This fawn couldn't reach to browse line.

saddles to the city. Sometimes he killed just for skins and left the meat to rot. In the fall of 1880 more than 100,000 deer were shipped from northern Michigan.

In parts of the West, and from Minnesota to Maine, deer were generally scarce by 1900. Bag limits were cut, sometimes to five, later to one. Then came the buck laws: Pennsylvania, 1907; New York, 1912; Wisconsin, 1915; Michigan, 1921.

For years die-hard hunters said it wouldn't work. But it proved to be a conservation natural. Buck laws helped the deer when they needed help. So did fire protection, refuges and warden service. And the cougar, wolf and bobcat were eliminated or greatly reduced over large regions.

We gave the deer almost unlimited food (for a while) and took away their worst enemies. In our hunting we saved the does. Since they mate promiscuously, bucks that became venison were never missed. It really worked.

In North Carolina's Pisgah National Forest deer had been wiped out early in the century. A few were brought in from New York and Florida, and in 1916 an inventory showed about a thousand animals. Twenty years later they had increased to nearly 10,000.

Pennsylvania was an almost deerless state in 1905. In 15 years they stocked a thousand-odd individuals from other areas. With refuges, a buck law, fire control, etc., they babied them along. At its peak in the thirties the state deer herd numbered near a million. Get the idea?

Here and there protected deer pyramided their numbers and in a few years browsed out their range. From Texas westward, grazing by domestic stock made things worse. Sheep and cattle might move on, but deer just starved and dwindled. Where the range was ruined it was kept that way by the few undernourished animals that managed to exist on it.

President Theodore Roosevelt created the Grand Canyon National Game Preserve and closed it to shooting in 1906. Government hunters went after the mountain lions that had been "controlling" the mule deer. When the herd hit its maximum in 1924 there probably were more than 100,000 animals in the area. Something had to give, and as usual it was the food supply. Two hard winters brought the crash. The deer starved down to about 20,000, and in another decade even that was cut in half.

Give a few deer effective protection and you've started something. They don't just build up, they run riot. On a 1,200-acre fenced range in Michigan, four does and



A deer range is no better than its winter food supply. Yarded deer browsed these saplings clean as high as they could reach. Overbrowsing quickly ruins a range.

two bucks were turned out in 1928. Six years later the place was overbrowsed. A drive was held, and the count was 160 deer! Now they have to take a third of the population every winter—bucks, does and fawns—in order to hold the herd down to what the range will feed. The annual production is a deer per 30 acres.

It has been found that a Central Utah herd of 50,000 deer will be maintained on a sustained-yield basis by the yearly cropping of 12,500 animals. That is slightly more than 20 per cent. Michigan's million-strong population would produce an annual increase of 400,000 if there were feed enough for them to survive!

Are we likely to overshoot our deer? And if we did, couldn't we mend matters by easing up on the does and fawns, as of yore?

Game biologists agree on their management formula: A deer range is no better than its winter food supply. Moreover, the herd must live on the browse that will grow every year. If they eat more than that, forest reproduction is destroyed, no more food plants can get started, and the range goes downhill.

In mild winters deer may remain scattered over a wide territory. That means high survival and delays the reckoning; but it's all the worse when it does come. In parts of the Pacific Northwest a hard winter may reduce deer range as much as 87 per cent. Wisconsin's capacity to produce depends upon 500 yarding areas. Michigan's summer range totals about 35,000 square miles; but the state's 600-odd yards comprise only about 2,000 square miles. Into these swamps deep snows send more than a million deer—in excess of 500 to the section of land—nearly one to the acre!

A cleaned-out cedar swamp looks like a tufted green spread held up by a maze of bare poles. It resembles one of those heavily grazed wood lots where a cow can stand on one edge and nod to a friend on the opposite side. But a deer will stand on its hind legs. The line is up as high as the tallest bucks can reach.

Yes, the tallest bucks. Which leaves fawns and the smaller does to be the first to succumb. In a sample of 1,428 starved deer examined by Wisconsin Fieldmen, 76 per cent were fawns. Well, why don't they move? Across the ridge is a swamp without a wintering herd. What do you mean, food shortage?



If game men were permitted to apply their management know-how, the useless waste of starvation-killed deer like this one would cease. It would be hunter-harvested.



There could have been a fitter end than starvation for these deer. It's the does and fawns which are hit the worst. But public opinion resists open seasons on them.



Pennsylvania hunters must decide whether it will be **THIS** . . .

At this the game technician looks grim. Brother, deer are just cussed. They won't move. You can't drive them, or bait them. They will keep coming back to that same swamp each winter until it's clean—and then leave their bones among the cedars.

The evils of the buck law and too many deer boil down about like this:

1. Overpopulation means destruction of the winter food supply and permanent deterioration of the range. That reduces herds the hard way—we are going to have fewer deer, aren't we?

2. The deer themselves become stunted and inferior as game.

3. Agricultural damage skyrockets. This leads to unending payments and constant trouble.

4. The practice of forestry becomes impossible. Tree reproduction is stopped and timber values go out the window.

5. The range is ruined for grouse, snowshoe hares, turkeys, and other kinds of game and fur.

6. Watersheds erode, aggravating flood conditions and helping to silt-in reservoirs.

7. Thousands of illegally-killed deer are left in the woods. Hunting ethics and sportsmanship deteriorate.

8. Other thousands of animals starve and are wasted instead of going into the food locker.

A comparison of hunting harvests in Pennsylvania and Michigan indicates what the sportsman may lose by the failure to harvest surplus deer. Between 1931 and 1941 Pennsylvania had five seasons in which the killing of antlerless deer was legal; and the total take was approximately 725,000 deer of both sexes. In the same period the bag by Michigan hunters was slightly less than 428,000 bucks. It is fairly certain that in these 11 years a difference in the law cost Michigan gunners at least 300,000 animals that might have gone into the gamebag. The deer populations of the two states were roughly comparable, with the edge going to Michigan.

In the minds of many people the thing to do for starving deer is to feed them. That has been tried—most systematically in Utah, Colorado, New York, Pennsylvania and Wisconsin. It's no go. Deer are browsing animals and need twigs and buds in their diet. Given plenty of stock feed (usually hay), they continue to die, concentrate their numbers even more, and keep up the pressure on native vegetation. Feeding is prohibitively expensive; but its basic futility is the physical

impossibility of getting to enough of the starving animals to mean anything.

Plant winter food? The answer should be obvious, but Michigan spent \$50,000 to make sure. The plants are killed before they get started—just like the ones Nature put there.

Maine and Minnesota are good examples of states that are managing their deer. They shoot both sexes. Their herds hold up and are in good balance—except for a few still-closed refuge areas that are overbrowsed. Pennsylvania has had intermittent doe seasons since 1928—not often enough, and always with a fight. California, New York, Michigan and Wisconsin are the best examples of big deer-producing states where the buck law still prevails, except for limited crop damage areas. There are competent deer men, in all of these states, who could put the program on a sound basis overnight—except for public sentiment against doe shooting.

Wisconsin had a split season in 1943 and shot 62,000 does and fawns out of a total kill of 128,000. A multitude of hunters and resorters went frantic and they haven't tried it since. It didn't hurt the deer herd. In Michigan they shot 16,332 antlerless deer on "camp" licenses in 1941 . . . out of a herd of perhaps a million, remember? There was a near-riot over this "slaughter" also, and the state went back to bucks-only.

State administrators cannot cope with this situation. The sportsman himself must do it. Progressive elements are working on it, but they need help and the time is now.

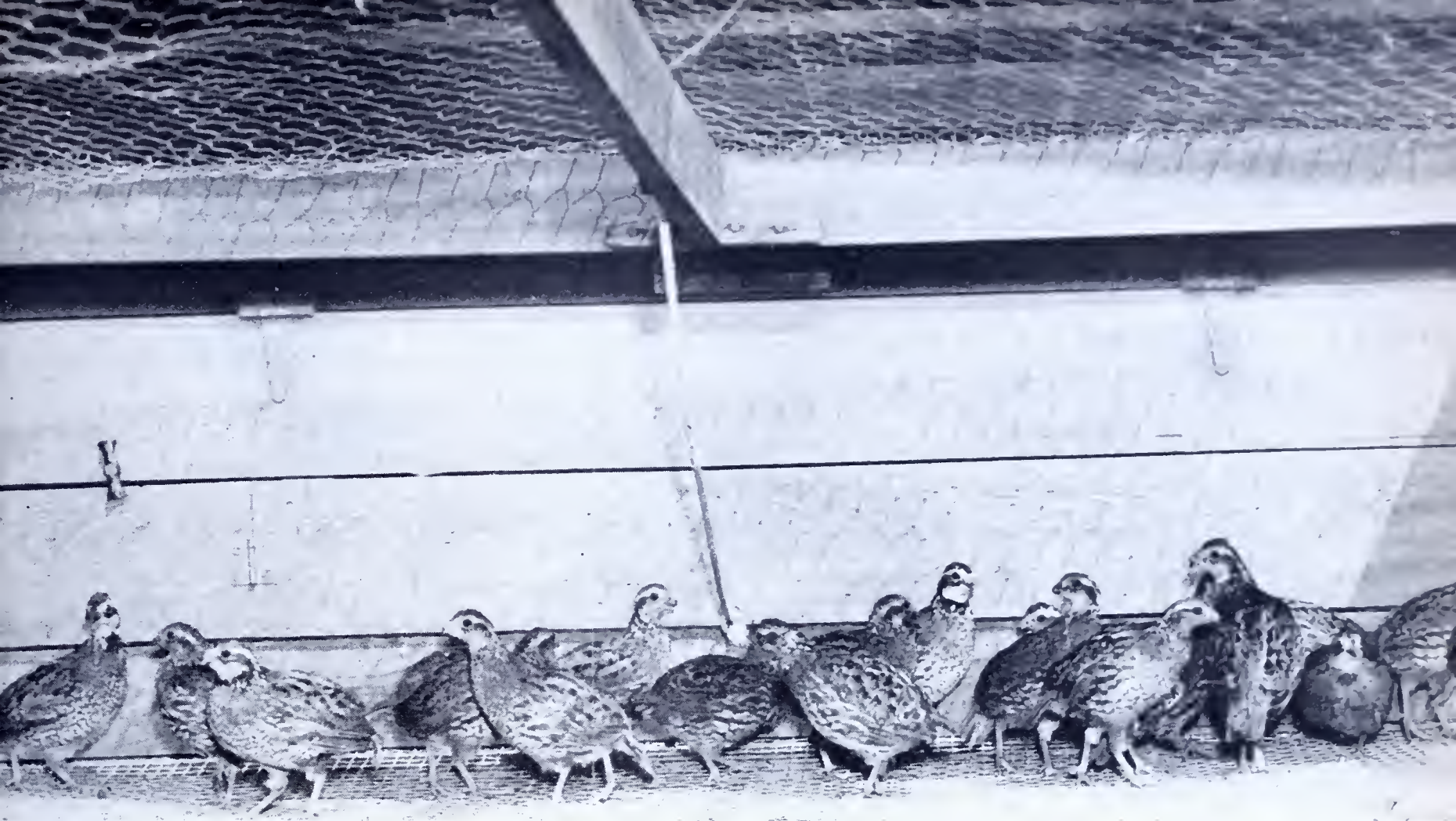
For several years club leaders, legislators and other key people have gone into the woods in winter to see for themselves—and they have come back convinced. It was the report of a "Citizen's Committee" that helped get the split season in Wisconsin. And a significant sign of the times appeared in a committee report (May, 1947) by members of Michigan's Oakland County Sportsman's Club. It described their examination of browsed-out yards and the finding of dead deer. And it said, "We respectfully submit to our club that it go on record as approving the controlled thinning of deer in these overpopulated districts as our Conservation Department sees fit."

Nationally we shoot about 10 per cent of the fall deer population. Evidently it's got to be more—and a mixed bag of ages and sexes. It looks as though 20 per cent is not out of line. That would be 20 per cent of a herd held at a lower level, wherever necessary, to keep the range healthy and to permit the pursuit of such enterprises as agriculture and forestry.

. . . or **THIS**

John G. Valence Photo.





Vitamin A for Bobwhite Quail*

D. F. WOODWARD,[†] R. V. BOUCHER, R. R. MURPHY and
E. W. CALLENBACH[‡]

IN RECENT years, tremendous numbers of pen-reared bobwhite quail have been released in Pennsylvania with unsatisfactory survival results. Inadequate storage of vitamin A during the growing period has been suggested as one major cause of the high mortality. It has been further suggested that the ability to store vitamin A is an inherited characteristic.

Review of Literature

"A" is a colorless and fat soluble vitamin. It is synthesized in the animal from carotenoid pigments of plants and most of the excess above current requirements is stored in the liver for future use. The conversion of carotene or pro-vitamin A to true vitamin A is now believed to take place during passage through the intestinal wall.

Vitamin A is essential for growth, health, and proper function of body processes of quail as well as all other animals. It is also necessary for good fertility and hatchability.

Symptoms of vitamin A deficiency are watery eyes, unsteady gait, and elimination of thick urates. As the deficiency progresses purulent material oozes from the eyes until the lids become crusted over and the eyes are pasted shut. Starvation and death quickly follow. Autopsy reveals pale and swollen kidneys, enlarged impacted ureters, and urates covering heart, liver and gizzard. Some birds may die of "A" deficiency without external symptoms of the disease but will show postmortem changes.

INTRODUCTION

Nestler (1946) stated there is a good possibility that a deficiency of vitamin A may have a significant bearing on survival and increase of bobwhites, in the wild state as well as in confinement.

Nestler (loc. cit.) conducted the first reported work on vitamin A requirements of bobwhite quail. He fed quail breeders levels of vitamin A from 0 to 8,000 International Units per pound of feed and found that the optimum level for egg production and hatchability was 6,000 I.U. However, for survival, the highest level, 8,000 I.U. per pound of feed, gave the best results. He further reported that the storage of vitamin A in the liver was in direct proportion to the level of vitamin A in the diet. For growing

stock, levels ranging from 0 to 5,000 I.U. of vitamin A per pound of feed were used. Survival and growth of the quail increased in direct proportion to the increase of vitamin A until the level of 3,000 I.U. per pound of feed was reached. Levels of 4,000 and 5,000 I.U. produced only slight and insignificant increases. Quail chicks that received no vitamin A were all dead in 3 weeks.

Nestler also compared true vitamin A with crystalline carotene and carotene supplied by several different feedstuffs. He found that true vitamin A produced better growth but not better survival than carotene at levels from 500 to 2,500 I.U. of vitamin A per pound of feed. At the level of 5,000 I.U. the true vitamin A resulted in a significantly greater storage of A in the liver than did carotene.

One interesting observation made in this experiment was that day-old quail chicks from the first hatch showed greater storage of vitamin A in their livers than did similar quail chicks from the last hatch of the season.

Nestler concluded that the requirements of bobwhites were 6,000 I.U. of vitamin A per pound of feed for breeders, 3,000-4,000 I.U. for growing stock, and 2,500 I.U. for maintenance in winter.

Latham (1947) in unpublished material stated "liver size and vitamin A storage capacity are inherited factors." He suggests that all breeders be placed on a vitamin A free diet. Then only breeders that survive

(Continued on Page 22)

* Paper No. 52 from the Pennsylvania Cooperative Wildlife Research Unit; Fish and Wildlife Service (U. S. Department of the Interior), The Pennsylvania State College, Pennsylvania Game Commission, and the Wildlife Management Institute Cooperating. Paper No. 1506 journal series of the Pennsylvania Agricultural Experiment Station.

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The above and the material at bottom of page 1 are similar to that used in connection with our last paper which appeared in the Pa. Game News XV, 11:10, 11, 28-30; Feb., 1945.

GRAYBACK

By RUTHERFORD MONTGOMERY



GRAYBACK was interested in the crate Gus was unloading from his truck. The crate contained twenty, four-weeks-old capons. The appetizing aroma which floated up from the crate made him wrinkle his pointed nose eagerly. His small, red tongue lolled out over his fangs. Even the hated man-smell of Gus could be tolerated when it was blended with so appetizing a scent. Grayback knew he was just day dreaming, that Gus would lock the capons in the screened pen below the barn. But he could come down to the little thicket above the barn, and sniff them once in a while. They would give him an appetite for blackberries, crickets and wood mice. They might even spur him into hunting a rabbit.

Had his cousin, the red fox, been in his place he would have devised ways and means for securing some of the capons. Reddy is a bandit; Grayback was just a burglar. He played a game no less desperate than Reddy, but he lacked the cunning to live within the shadow of man's dwellings, making use of man's own fields and hedgerows, defying him in the open, breaking cover before his hounds in country where hounds and horses can run freely. Grayback needed rough, wooded slopes, with tough-clawed thickets, dense jungles of poison oak and wild blackberry to survive. Reddy would have flouted the four big hounds Gus kept, he would have outwitted them with his cunning in the open fields, he would have outrun them and out-guessed them.

No men in red coats, mounted on fine horses, tootling horns, ever chased Grayback. They were disdainful of a fox that ducked into a blackberry thicket where ever a hound could not penetrate. They rated Grayback a coward and a dumb-wit. But Grayback had courage in as great a measure as Reddy. His kind, when cornered turned, and died fighting no matter if the odds be four big hounds backed by men armed with guns. Grayback often flashed into the open to taunt the big hounds to savage chase, but he always ended the chase safe in a thicket.

Right now Grayback was taking desperate chances. The clump of bushes where he lay was isolated. If Gus spotted him he would have to duck bullets from the rifle Gus always carried in the truck. He would be an open target all the way across the pear orchard to the breaks beyond.

Gus had tucked the capons away. He got into his truck and drove up a hill to his cabin. Grayback watched from his lookout point. Four big hounds ran out of a shed to meet the truck. Grayback yawned. He watched the hounds with much interest. They were low renegades, turn-coats who had gone over to man, servile slaves. He trotted out of the thicket and sat down in the open. A fox or a wolf would have seen him the moment he moved out of the thicket, but the hounds didn't see him. He could give a couple of sharp barks, and have them after him. A neat hundred yard sprint would take him to the rough. The

hounds were fast, much faster than Grayback. He wrinkled his nose and cocked one ear. Gus had gone into the house, eliminating the danger of the rifle. The hounds were stalking around the truck, sniffing the tires, reading messages left there by the town dogs. Each hound sniffed, then added a line of his own. Around the truck they marched, sniffing, hoisting a leg.

Grayback grinned. The temptation was great. He was a young fox, just coming into maturity. He had not yet learned that discretion was the rule which kept his kind alive. He made a low experimental noise in his throat. It was not loud enough to disturb the hounds, so he gave voice to a taunting yelp, followed by a short bark. Mooch, the red-black leader of the pack turned from the tire he was checking. Grayback sang out again. The hounds looked up the little hill and saw him. With savage howls they charged up the short rise of ground. Grayback whirled and was off.

The hounds broke over the hill, fanned out, with Mooch running well ahead, silent, saving his breath. The three younger dogs trailed, howling as they ran, whimpering between howls. Grayback fled, straight as an arrow, for the breaks beyond the last row of pear trees. He fled like a gray shadow, his brush flowing out behind him, the setting sun glinting on his sleek fur. As he ran he realized that he had overlooked one thing—Gus had just disced the



JACOB
BATES
ABBOTT



JBA

orchard and the ground was soft. Grayback could feel Mooch closing upon him, and he strained every muscle. Mooch stretched his long neck and bared his fangs; one more lunge and his teeth would sink into the rump of the little fox. Grayback flattened closer to the ground, he swerved sharply, cutting to one side like a skater on sharp blades. Mooch snapped his jaws shut on thin air. Grayback swerved back again, then skidded under a gnarled limb. He flashed through a maize of barbed thorns as tough as steel wire without so much as losing a hair. Mooch hit the thorny mass, and a howl of pain swelled from his chest. He struggled and threshed, leaving patches of hair on the thorns. The three young dogs slid to a halt and stood watching him as he wiggled out of the thorn bushes. Mooch glared at them, then he sent a defiant howl after the fleeing fox. Grayback answered him with a lusty bark.

Grayback kept to the thicket for some time. Mooch was a smart hound; he might circle, and wait at the first clearing. As he slid along he laid his ears back. He had learned something and was considering

it. He had overlooked something, and Mooch had very nearly had him. Before he had gone a quarter mile he was grinning happily. There was an advantage in weighing only eight pounds; being slim of body, it let him slide through tight thickets, where a fifty pound hound could not go. Gus always said Grayback was one third wildcat, one third coon, and one third bush rabbit. He could climb trees and often did, he was smart but careful, and he was at home in any thicket, so Gus was near to right about him.

Grayback was something of a dandy, too. His fur was sleek and well groomed, a salt-and pepper color above, with warm buff underfur showing through. His ears, the sides of his head and neck, his legs; were tinged with brownish-orange. His face had the coon markings of dark brown from eye to nose. The mane along his tail was black, and the tip was black.

Grayback pulled up at the edge of a little clearing. He was ready for his evening meal. His first course was blackberries. He plucked one small bush clean, licking his lips, munching eagerly. When he had cleaned the bush he sat down to listen and and to wait; virtues he had learned were highly valuable. A cricket began chirping close by. Grayback did not move or turn his head, but after he had listened a full minute he knew exactly where the cricket was holding forth. It was under a leaf only a foot from his paw. Turning, he thrust his nose under the leaf, pushing it down upon the startled cricket. The cricket was tasty, though not very filling. Grayback licked his lips and cocked his head. A blade of grass nearby had moved. Not a mouse or the blade would have wiggled again. He edged forward. A fat, grass snake lay curled up beside a stone. Grayback put out a paw and stirred the snake. It reared its head and flashed a forked tongue at him, then slid from its bed. He was on it in a second, snipping it neatly into two parts. He munched the tail part first, then at the rest. The snake was quite filling, it banished the last traces of hunger.

With his belly comfortable Grayback stirred restlessly. He had been having

uneasy spells lately, strange urges which filled him with wanderlust. When he met the Slim One, whom he had seen about most of his young life, and who had grown up not far from his ridge, he had tried to be friendly. She had ignored his yelps, and his attempts at play. He knew she would be not too far away. He lifted his muzzle and barked eagerly. His bark was answered, not by the Slim One, but by a gruff old male. Grayback's scruff rose. That would be Scarface, from the ridge across the valley. Grayback bared his fangs. Never before had he given thought to ownership of the ridge, but now he resented Scarface's invasion. He headed toward the spot where Scarface was.

Grayback had mixed with Scarface twice before, and each time he had taken a thorough trouncing. Scarface weighed almost twelve pounds, he was old and wise and full of tricks when it came to fighting. Grayback had gotten licked before because he had teased Scarface. Tonight he felt different; he was angry; he meant to challenge Scarface.

The moon was flooding the slope when Grayback found his rival. Scarface was prancing about in a little clearing above Gus' cabin. He was putting on his best show because he had an audience, The Slim One was seated on a little mound watching him. When Grayback entered the meadow, she turned her head. He called to her, but she didn't answer, she turned back to Scarface. Scarface ceased his prancing, an angry growl rumbled in his chest.

Grayback trotted on toward the Slim One. Scarface whirled and leaped to meet him, his fangs bared, his eyes flaming. Grayback quartered to meet him. He remembered the mauling he had taken the last time he met Scarface, but he didn't break and run. Scarface pulled up close to Grayback, he halted and arched his back, lowering his head and turning it to the side. He sensed a change in Grayback. Grayback arched his neck and snarled. Slowly they moved around in a tight circle. Suddenly Scarface lunged. Grayback, being new to this game,

(Continued on Page 24)



Game Lands No. 169 consists of 702 acres of mixed farm land and wood lots located in upper Mifflin Township. These lands are a portion of the broad and historic Cumberland Valley region of Pennsylvania where wide open areas always have been important in an agricultural way for growing grains and producing very fine fruits in their large orchards. The location of these acres is approximately five miles from Newville and ten miles from Shippensburg. Highway route No. 641 lies within a half mile of the tract and several good township roads run through dividing it into tracts A and B.

For an interior county it is also rich and outstanding in military history which begins with the French and Indian War days. Because of the land's exposure on the extreme Frontier, the early settlers suffered the full vengeance of Indian raiders. As a result, there were a large number of Frontier Forts, the earliest of which was Franklin, erected in 1740 at Shippensburg, a few miles away from the Game Lands.

Accessibility was not always a feature of these lands. In the early days only two Indian trails led into this general area; one from the North following through Dublin Gap on to Newville; the principal one from the west known as the Three Square Hollow trail, a branch of the great trail from the Ohio to the Susquehanna.

The Indians along these trails were friendly and peaceable until 1753-1754. Then a number of barbarous massacres were committed, confined mostly to the vicinities of the trails. Upon one occasion a father and child were murdered. During the melee the mother and other children escaped but returned later to find the murdered child lying near the fence tomohawked and scalped while it must have desperately attempted to cross over and escape. Another

family who lived nearby learned of this brutal treatment, became alarmed and fled to a nearby fort. But in their fright and haste to reach safety, they forgot their small baby who was sleeping peacefully in the cradle. A young relative who was visiting these alarmed people volunteered to go back. Carefully and ever cautiously, lest he be ambushed, he was successful in returning the baby to the safety of its mother.

Turning from historical to topographical development these areas show that much of the original farm land on the Game Lands was submarginal, reverting back to areas of scrub pine and locust. In general, the wood lots are located on wet sites, unsuited for farming. About 20% of the farm land is too wet to plow in ordinary years because of poor drainage. Of the entire farm area approximately 200 acres are farmed by the Game Commission or sharecropped on a rotation basis, while the remaining acreage of submarginal land is retained and utilized specifically in land management practices.

The area is managed for rabbits, ring-neck pheasants, quail and squirrel. Raccoon are quite numerous particularly along the lowlands bordering the Conodoguinet Creek and Three Square Hollow Run. Muskrats inhabit these lowlands and creek banks especially during the wet years.

Up until a decade ago these lands were hunted extensively and enthusiastically by the local citizenry but gradually this enthusiasm subsided. Game became more and more scarce; farming ceased entirely, and erosion set in with a gradual decrease in food and cover. Very little game was to be found. Stocking and management of the area by the Game Commission has progressed to the point where local sportsmen again hunt in increasing numbers an indication that our efforts and endeavors are

STATE GAME LANDS

NUMBER 169

PREPARED FOR THE
FIELD MANAGEMENT BUREAU

By

J. S. CHICK, SSA

Division "D"

at least partially successful and that the game, especially rabbits, have increased proportionately. Of course, here as elsewhere, the demands for game have far outstripped the normal reproductive capacity of the land and perhaps the present day demands can never be met. Our early settlers, even though their demands were of an absolute necessity, joyously recognized the abundance of all wildlife creatures that had increased with the departure of their enemies, the Indians.

With the exit of the Indian, wildlife multiplied and increased to an unusual degree. Wildlife was plentiful everywhere. There were large numbers of turkey and squirrels. Deer and bear were abundant especially in mountains while their natural enemies, wildcats, wolves and panthers, were numerous likewise. Muskrats and other furbearing animals were taken from the streams and their skins were used as a medium of barter between the Indians and early settlers. Fish of all kinds were caught in the Conodoguinet, the same stream which the Game Lands abut today. In the eastern part of the county migrating shad, not halted by any man-made barriers, were taken in large quantities. Crude nets or seines, appropriately called brush nets, were fashioned from boughs or branches of trees and improvised to trap the moving fish.

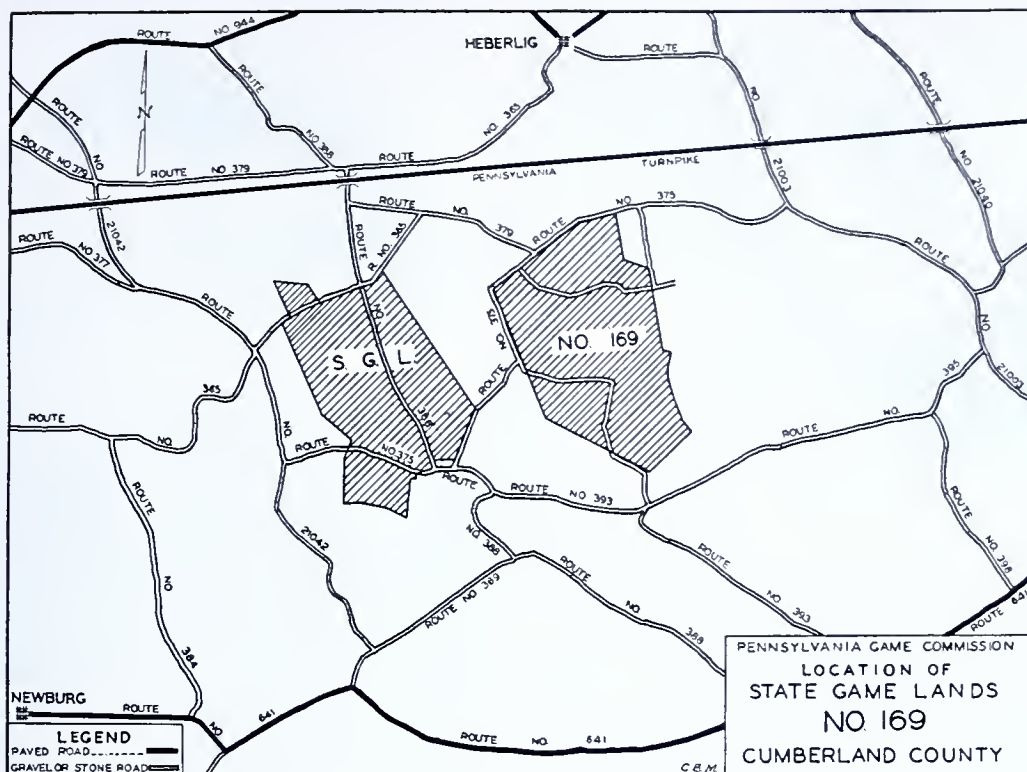
Prior to the purchase of these lands by the Game Commission, its use indicated a type not in keeping with its capabilities. Portions of it were misused and eroded to a great extent. Hillsides were marked with unsightly gullies which, if left unchecked, would eventually result in a great loss of precious soil; and the land was worn out almost beyond the point of reparation.

Something had to be done. The Game Commission planted over 27,000 evergreen seedlings in small groups or strips providing cover for game as well as retiring eroded hillsides. In addition, fence rows and gullies were planted with 16,625 game food producing shrubs and vines. Experimental strips were seeded direct with a mixture of Japanese rose, grape, bittersweet, Japanese honeysuckle and silky dogwood.



Photo by Chick.

An old brick farmhouse on tract "B" is used as a storage building for small amounts of seed, fertilizer, and equipment.



Successful plantings were made with lespezea resulting in fairly good stands producing a protective cover for the soil and game by their dense forms. Rabbits frequented the area utilizing the bark and seeds as food. Gullies planted with multiflora rose served as a check on erosion in addition to providing excellent cover and food for ringneck pheasants and quail. The fruits of this shrub ripen in October and remain on the bushes, unless entirely consumed by wildlife, until late in the following spring.

Approximately 200 acres are being sharecropped and about 45 acres are in food plots. Attempts are being made to reclaim about 25 acres of poorly drained fields. Approximately 125 acres which were reverting and did not lend themselves to cultivation using standard practices have been farmed on the contour. Results are gratifying indeed.

Individual sharecroppers harvesting the 1948 wheat crop were surprised at the splendid yield in an abnormal season when the elements were unfavorable for normal growth. Adjacent land owners were disappointed on a return of only 12 bushels per acre in comparison to slightly less than 23 bushels per acre on the Game Lands. One farmer remarked, "From now on, I too, shall farm my land on the contour." Sharecroppers harvested over 800 bushels of wheat; 3600 bushels of corn and 50 bushels of rye in addition to 800 bushels of corn and 90 bushels of wheat produced by the Game Commission with their own equipment. To supplement the natural food on the area, 7 acres of mixture, 40 acres of clover and timothy and 2 acres of soy beans and many additional acres of corn, wheat and oats are allowed to remain on the area. Much of the harvested wheat was shipped to the Wild Turkey Farm for use in the propagation program there while corn is stored in cribs on the area as supplemental food for the artificial winter feeding program in this district and others as well.

There is an old brick farmhouse on tract B which is used as a storage building for small amounts of seed, fertilizer, tools and equipment. This old building served as an abode, as did many others, during the more prosperous period when the soil still retained many of its precious minerals temporarily lost through misuse. In retrospect, one visualized the homes of the early settlers, roughly hewed of logs, serving not only as a family dwelling but a virtual fort against Indian attacks.

Two refuges were established in 1940 with a combined acreage of 69 acres surrounded by 1.7 miles of wire.

As on all other state Game Lands detailed management plans have been prepared and followed for the past several years. Some of the most important work planned for improving the wildlife habitat includes the planting of a living fence of multiflora rose. This rose promises to be one of the most important discoveries by conservation experts in recent years. It is a multi-purpose plant which will be used to replace fences now overgrown with poison ivy; as contour hedges to prevent erosion and furnish escape cover close to food and nesting grounds; as wildlife borders in conjunction with other trees and shrubs; and to create clumps of cover in odd corners, eroded gullies and around old house foundations.

Other seedlings being used include the basket willow, high bush cranberry, silky and red ozier dogwood, and balsam fir for planting in wet locations where the land cannot be drained and reclaimed for better land usage.

Since many acres of this bottom land is wet and becoming more so every year it has created a definite drainage problem. Opening of clogged drainage ditches with a light bulldozer and the bedding of certain fields will help solve this problem.

This moist bottom land affords an excellent opportunity to improve the muskrat and wild duck populations. Tentative plans include the building of a series of shallow earthen dams to retain a more or less constant level for these two species. It is also likely that several farm fish ponds will be built on this area as commission equipment becomes available.



Photo by Chick.
A Game Protector inspects a stand of multiflora rose planted in a gully.



One day early in March Jim Shoup, while filling turkey feeders with corn on the West Branch of Hicks Run, found a large raccoon that had entered one of the feeders and became trapped inside. After a struggle, Shoup managed to get the animal into a burlap bag and out of the feeder. Because of the unusual appearance of the animal, he decided to bring it to me for my opinion as to how any wild creature could get to look like it did. I could tell that coon any place and any time after one look at him. Some time previously the raccoon must have been in a tough battle that left it marked for life. One of its ears was ripped several times, its left hind foot was half gone, its face was scarred in not less than a dozen places, and its nose had part of the left nostril missing. On top of that, there was only about two inches of tail remaining. Yet, even with all these old battle scars, the animal was in very good condition and all the earmarks of its fights were very well healed. We decided to release the animal again about five miles from the feeder.

About two weeks later Fish Warden Close, Jim Shoup, and I were checking some of the feeders again and when we came to the one where the raccoon had been trapped, we were more than surprised to see our old friend scampering away from a nice feast of corn. Five miles did not seem to be much of an obstacle to this little fellow after all he must have gone through during his life and fight for survival.—Game Protector Norman L. Erickson, Emporium.



JBA 2.

On the morning of March 31 I had a call from Cleve Strouse in Nittany Valley telling me that he had 86 pullets killed the night before. I was a bit skeptical of the story but decided to investigate. Upon going to the Strouse farm I found that there were actually 86 dead chickens and also a dead culprit—a Great horned owl. Quite a night's work for one bird!—Game Protector Miles L. Reeder, Lock Haven.



During the week of March 21st, "Chuck" of "Chucks and Vi's" lunch stand located along route 26 north of Saxton near the Fishers Monument, was on route to Martinsburg to test a car radio when he witnessed a sight seldom seen. A doe deer crossed the highway in front of his car and attempted to climb the bank of a cut. Chuck stopped his car to see how it would make out and was in time to see the deer jump against a panel truck which was following. The deer was dazed and had trouble getting to its feet. A lady who was in the panel truck decided to see what all the commotion was about. She climbed out of the truck at about the same time the deer jumped into the open end of the vehicle. There was a great thrashing about, out came a chair, a cushion and some other articles followed by the deer which bounded down the highway and disappeared into a wooded area. Fortunately, no one was injured.—Game Protector William Lane, Hustontown.



On Sunday, March 27, I had a call from a farmer in Monroe Township telling me that some dogs were running a deer early that morning near his house. Seeing that the dogs were pulling the deer—a doe—down every few feet, he went to the scene and found that they had injured the deer so badly that the man shot it to put it out of its misery. When I arrived, I noted that the dogs had actually eaten about half of one hind quarter. The farmer that finished off the poor creature was along with me and told me that the meat was eaten off while the deer was still alive. The dogs just kept biting into that hind quarter. Surely, if some people could see that such things do happen, they would be a little more careful to keep their dogs under control. As is usual, these dogs were curs but not homeless. Examination revealed that the doe would have given birth to a buck fawn this spring.—Game Protector Martin Shaffer, LeRoy.

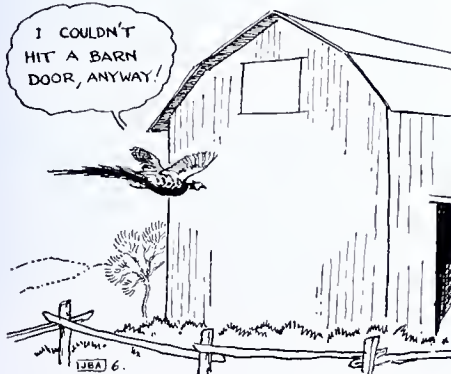
An old bear and four cubs were discovered in early March by a school teacher, Steve Nesbella, near Marienville and it certainly has created a lot of excitement in this little town. Quite a number of people found where the bears were staying and numerous pictures have been taken of the cubs. It was my pleasure to visit this bear nearly every day for about three weeks. I watched the cubs from the time they were still unable to leave the "nest" until they were able to climb trees and follow after their mother. The last week I watched them they seemed to get all their pep at once and started to climb trees and play just like kittens. The old mother was very attentive and when feeding time came, she would be right on the job and would stay with them for about an hour. Nothing seemed to disturb her while this was going on. She would even fall asleep at times when the cubs were nursing and I know she knew I was watching since I was only about 25 feet from her. One sunny day she picked up one of the cubs by the scruff of the neck and put it up on a big rock. The old bear left the rock and the cub ventured too close to the edge and got scared. It set up an awful howl and in a second the old bear was up on the rock picking the little fellow up and placing him in a safer position. I believe I could write a book from just the experiences I had watching this bear and her cubs; it was one of the most pleasant things I have watched for a long time.—Game Protector William R. Overturf, Marienville.



A bird dog that will point foxes is well worth keeping, according to a report that I received from Abe Moses of Washington, Pa. On two different occasions while training his pointers during the month of March, one of his pointers came on point. Moving in towards what he thought would be a game bird, Mr. Moses saw a large gray fox disappear near an old slab pile. After taking his dogs to the car, he drove to a nearby farm to borrow a shotgun. Upon his return he sat down near the slab pile and after a few minutes, the fox appeared and was disposed of with a well placed shot. About ten days later one of the pointers flushed a gray fox out of an old hay field and pursued it to a nearby hole. This hole was dug out and contained a litter of four pups not more than a week old.—Game Protector Glenn A. Kitchen, Canonsburg.

Late in March a sportsman showed me the hide of a gray fox he had killed. The hide looked like a pin cushion, all full of porcupine quills. I learned that this animal also had the inside of its mouth and tongue filled with quills, as well as its eyes and feet. Apparently, a fox will eat a porky—or try to—although I have never seen where a fox had killed one.—Game Protector Martin Shaffer, LeRoy.

A man training his dog in March flushed several pheasants, one of which flew across a creek and into the side of a barn which was painted gray. When he went over to see what damage had been done to the bird, he saw not one but FIVE pheasants lying on the ground. The farmer stated that the other four had killed themselves that same day by also flying into the side of the building. No suitable explanation has been found for this unusual occurrence.—Game Protector William A. Moyer, Allentown.



While trapping predators on Farm Game Project No. 146, Fayette County, in early March, I came upon an unusual sight. As I approached a fox set, I could see a red fox caught in the trap. To my surprise, a ring-neck pheasant was strutting around just outside the circle in which the fox was held. He appeared to show no fear and would cock his head to one side and look Mr. Fox over very carefully, as if to say, "Brother, you are in a lot of trouble." I watched this go on for a few minutes, then approached the set a little closer. The pheasant, seeing me, took off in a hurry, as it apparently had more fear of me than it had of the fox. I thought afterwards that this pheasant had better be little more careful. The next fox he looks over may not be in a trap.—Andrew Ewart, Carmichaels.

The story that Mr. Jno. E. Schroll writes in the March issue about the early days of the opossum, in my opinion, should be clarified somewhat. I get the impression that Mr. Schroll doubts the fact that infant opossums are carried in the mother's pouch.

I have live trapped rabbits for the Game Commission since the program was first inaugurated back in 1937. I have caught a great many opossums in box traps, and being curious about the animal, have closely observed the female during the early spring months. Many carrying young of various sizes and numbers have been found. One particular female I can recall had seventeen newly born babies in her pouch. Eight of them were dead while the living nine were each attached to a teat, of which the mother normally possesses thirteen.

Records show that after thirteen days as an embryo a baby opossum is born. Blind, with half developed rear legs, but fully developed front legs and feet, hand over hand the tiny worm-like half-inch-long creature drags its way along its mother's belly, guided by a streak of milk, to the warmth and security of her abdominal pouch. There it remains for about seven weeks, feeding upon its mother's milk. The opossum is so small at birth that a litter of eighteen might easily fit into a tablespoon. After a month the pouch seldom contains more than seven or eight young. When they have reached the size of mice, they often go exploring over the mother's body, but will scurry back into the pouch at the slightest alarm.

After the second month they will travel on the mother's back, their tails entwined about hers, their small feet clutching the fur of her back. In this manner they are carried over the countryside, never losing their hold, while the mother hunts for food. I cannot say how big the young are when they start life on their own, but on several occasions I have caught them in box traps when they were smaller in size than common house rats.

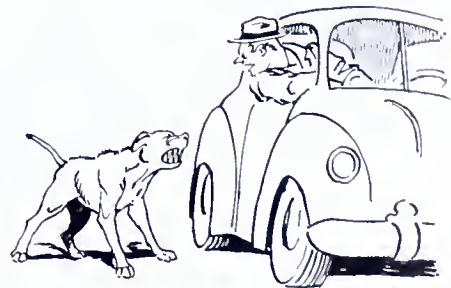
The opossum is the toughest small animal I have ever tried to kill. I recall one that I tried to kill by submerging him in water for ten minutes with but very little ill-effect on the critter. The question is often asked, how can you be sure the opossum is dead? One sure way is to note the position of the tail. When he is "playing" dead, he will have a hook in his tail and his body will be stiff. When he is really dead, the tail is relaxed.—Farm-Game Manager Zenas R. Leslie, Somerset.



While checking fox traps recently in the refuge on Game Lands 189, Beaver County, I heard a bird chattering near a corn crib. Upon investigating, I found that the mate of the bird which was making all the noise had gotten into the corn crib and was unable to find its way out. I didn't know what the bird was but looked it over carefully before releasing it. Later, in checking my bird guide, I found that they were a pair of Bewick's Wrens. They are still in the refuge as I have seen them since.—Game Protector David H. Heacox, Clinton.

During the last snow of the winter a group of local fox hunters and their hounds chased two female foxes to dens. With the consent of the landowner, the men dug the dens open and found seven fox pups in each den. With the two adult females and the pups there was a total of fourteen foxes killed. They kept two of the pups alive. One of these is being raised on a bottle and seems to be doing quite well. The other pup was placed with a female cat which had lost its kittens. The cat quickly adopted the fox pup and it is doing even better than the one on the bottle.—Game Protector Clair W. Dinger, Albion.

A sportsman who happened to be driving along the river one night in March noticed a deer coming down an embankment heading for the water. The deer looked somewhat exhausted so he surmised it may have been chased by dogs. Correctly enough a dog came following along in about three minutes. Having no weapon, the man picked up some large stones and tried to drive the dog from the trail. The dog not only left the track but turned on the man. The dog was of a large strong breed and was of a vicious nature. Since he had no weapon with which to defend himself, the man was forced to seek shelter in his car. He did make a few attempts to get out of the car again but each time the dog came after him. If such a dog will attack a human being, no telling what he could do to game.—Game Protector N. J. Molski, Wyalusing.



TOBYHANNA MILITARY RESERVATION TRANSFERRED TO THE COMMONWEALTH

PENNSYLVANIA's renowned program for the conservation of two of its vitally important natural resources, wildlife and forests, and its facilities for outdoor recreation and public hunting have been materially advanced through the acquisition by the Commonwealth of the famous old Tobyhanna Military Reservation in Monroe County. Large benefits will accrue to sportsmen and the general public from public use of this area.

A former artillery range and camp, this military establishment comprises 21,099 acres, and was used for many years by both regular army forces and the National Guard. The area is well known to many ex-soldiers throughout this State since artillery units of Pennsylvania's own 28th Division were trained here during a long period of years. Hundreds of buildings formerly used by military personnel are concentrated within a few hundred acres near the town of Tobyhanna, many of which will now serve advantageously for recreational uses.

The entire 21,099 acres have been transferred by the Federal Government to the Commonwealth of Pennsylvania, part of it to the Game Commission for wildlife conservation purposes, and the remainder to the Department of Forests and Waters for park and recreational use. Acquisition by the Commonwealth of this large, valuable property will materially benefit the people of Pennsylvania in many ways and particularly residents of the northeastern section. U. S. Highway Route 611, commonly known as the Lackawanna Trail, traverses the former military reservation. Attention is invited to the map reproduced on the opposite page which shows the reservation and surrounding areas.

The military reservation was declared surplus to the needs of the War Department, and in 1947 was turned over to the War Assets Administration for disposal under provisions of law. How to dispose of the property, both real and personal, along with many other war surplus properties and equipment distributed throughout the world, valued at billions of dollars, to the best advantage of the public was then the responsibility of this Federal agency.

The Game Commission immediately interested itself in securing for use of the sportsmen of Pennsylvania the major portion of the Tobyhanna Military Reservation, particularly that portion which had been used for refuge and hunting purposes as early as 1938, under a license granted by the Secretary of War. The first license, which became effective August 1, 1938, was terminated September 18, 1942 during World War II. It was reinstated June 1, 1946 when the area was no longer needed for military use. By what means the Commission might secure the acreage desired was more or less obscure. Quite naturally an area such as this was of special interest to the Department of Forests and Waters, particularly since part of it presented splendid possibilities for public recreation.

A pleasing solution to the desires of the two State agencies, as well as to the problem confronting the War Assets Administration toward disposal of the property to the best advantage of the public, resulted from two Acts adopted by the 80th Congress during 1948. A brief explanation of both Acts follows.

Public Law 537, known as the Burke-Wherry Act, was of utmost importance to sportsmen and the Game Commission. It provides that lands chiefly valuable for wildlife conservation, which in the determination of the War Assets Administration are available for such purpose, may be transferred without reimbursement or transfer of funds by the Federal agency having jurisdiction or control of the property, either to:

- (a) The State agency concerned with the management of wildlife resources; or to
- (b) The Secretary of the Interior (U. S. Fish and Wildlife Service) if the real property has particular value in carrying out the national migratory bird management program.

It was immediately apparent that the area was of no interest to the United States Fish and Wildlife Service. As a matter of fact, representatives of that Service later aided the Game Commission in every way possible toward securing the area wanted by the Pennsylvania Game Commission.

Public Law 537 further provides that transfer of surplus lands to other than a Federal agency shall be subject to:

- (a) The reservation by the United States of oil, gas and mineral rights;
- (b) The condition that the property shall continue to be used for wildlife conservation; and
- (c) The condition that in the event the property transferred is no longer used for such purpose, or in the event it is needed for National Defense, title shall revert to the United States.

The Act which helped the Department of Forests and Waters secure that portion of the reservation in which it was primarily interested was Public Law 616. It provides that surplus lands belonging to the Federal Government which the Secretary of the Interior considers suitable and desirable for use as a public park, public recreational area, or historical monument, could be conveyed to the State under certain conditions. Conveyances for park or recreational purposes shall be made at a price of 50 per centum of the appraised value. It further provides that such property shall be used and maintained for park or recreational purposes for at least 20 years, or at the option of the United States, shall revert to the Federal Government.

The Game Commission filed its application for approximately 14,000 acres, under Public Law 537, on February 4, 1949 and supported it with a considerable volume of data describing the type of land, its suitability for wildlife uses, nature of forest growth, and information explaining how the area would be managed for the conservation of wildlife. The application was approved by the several War Assets Administration officials on various dates during April and the transfer was made by quit-claim shortly thereafter.

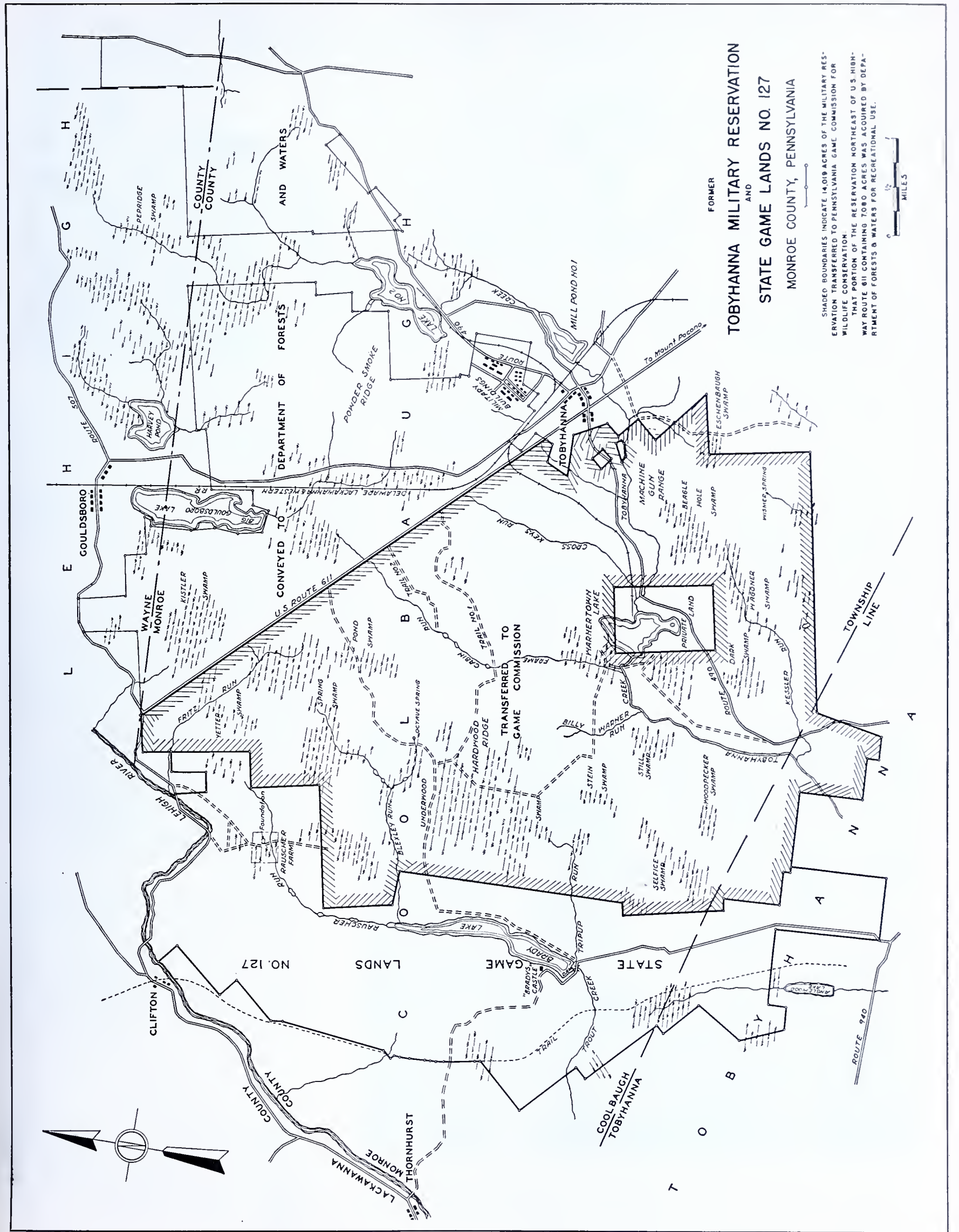
The area obtained by the Game Commission, without cost, is all that portion of the Tobyhanna Military Reservation situated southwest of U. S. Highway Route 611—the Lackawanna Trail—comprising 14,019 acres. It may be of interest to sportsmen to know that \$81,350 was the appraised value by the W.A.A. for this land. The area is second growth forest land, typical of the northeastern section of Pennsylvania, and no part of it is suitable for farming or grazing. Approximately 67 percent of the area is classified as timber land and 33 percent marsh and brush. Game food producing species such as Juneberries, both high and low huckleberries, blackberries, and various others are present in abundance. In brief, food and cover conditions are good.

Deer, bears, ruffed grouse, snowshoe and cottontail rabbits, woodcocks, raccoons, squirrels, and other forest-game species provide good hunting. Various species of waterfowl use the swamps and beaver dams for resting and feeding during migration, and wood ducks generally nest on the area. Furbearers furnish valuable pelts for trappers. The beaver population is unusually large. Minks and muskrats are fairly abundant and otters are present in limited numbers. Favorite fishing streams are the headwaters of Tobyhanna Creek, including Frame Cabin Run, Cross Keys Run, and Kistler Run, as well as Blexley Run which flows into Brady Lake on State Game Lands No. 127. None of these streams are contaminated or subject to pollution.

The program of utilization filed with the Commission's application to the War Assets Administration provides for management of the area under the best known wildlife practices to propagate and foster a sustained yield of economically valuable game animals, game birds, and furbearers. Since it is largely forest land, management will be based on a sustained yield of forest products, including timber, mine props and other mine timbers, railroad ties, pulpwood, etc.

It is expected that small portions of the area will be set apart as game refuges and retreat areas to guard against over-shooting, but that the major portion, that not set apart as refuges, will be open to legal hunting, trapping and fishing by holders of hunting and fishing licenses.

The area obtained by the Department of Forests and Waters under Public Law 616, comprising 7,030 acres, is all that section northeast of U. S. Highway Route 611. It includes many army barracks and storage buildings near the town of Tobyhanna, and offers great possibilities for public recreation.





Senate Bill Proposes Duck Stamp Price Increase

A bill (S. 1076) to double the present price of the migratory bird hunting stamp has been introduced by Senator Edwin C. Johnson of Colorado, the Wildlife Management Institute reports.

There are many sound reasons why this bill should be enacted. The \$1 duck stamp was adopted in 1934 to provide funds for the establishment and management of migratory bird refuges. In terms of purchasing power, the individual hunter who purchases a stamp today contributes little more than half as much as he did when he bought his stamp in 1935 or 1936. The proposed amendment would tend to equalize changes in the valuation of the dollar.

The refuge system, set up with revenue made available to the U. S. Fish and Wildlife Service through the sale of these stamps, is more seriously needed today than at any time in our history, and the value of the refuges will grow as time passes.

Pintail from Labrador Recovered in England

A trans-Atlantic record for wild waterfowl may have been set by a young pintail banded last August 25 at Hamilton Inlet, Labrador, by A. J. Reeve of the Wildlife Management Institute's Northeastern Wildlife Station. Instead of joining other pintails banded in the same trap, this adventurous individual headed east and was shot only 21 days later on the River Dart between Dartmouth and Totnes in South Devon, England. Its trap-mates were recovered along the Mississippi flyway.

Ornithologists cannot say whether this bird was a European pintail breeding in Labrador or an American pintail wintering in Europe since only the band was recovered from the hunter. At any rate, the incident provides a terse commentary on the amount of energy wrapped in the feathers of a wild duck.

Expanding Civilization Threatens Alaska's Wildlife

Civilization's expansion into Alaska's once inaccessible areas is depleting the Territory's wildlife resources, the Alaska Game Commission declared recently in its annual report for fiscal year 1948 to Secretary of the Interior J. A. Krug.

The sudden influx of population, the tremendous improvement in transportation facilities, and the presence of thousands of troops, who have much leisure time and good hunting equipment, have all had a serious effect on Alaska's wildlife, the Commission said.

The Commission predicted that white sheep and barren ground caribou, found nowhere else under the U. S. flag, may soon become extinct in Alaska. The giant Alaska moose is also reported to be fighting a losing battle for existence against hunters and predators.

The Commission called for a larger wildlife law-enforcement staff, more wildlife research, an expanded predatory animal control program, and increased Federal funds for wildlife restoration.

Composed of five Territory residents, the Alaska Game Commission is the Territory's counterpart of the game and fish departments found in each of the 48 state governments. It performs in an advisory capacity to the Fish and Wildlife Service.

Game and fur animals and fish have always been the basis of the Territory's economy. The commercial fisheries provide almost 80 percent of Alaska's income. During fiscal year 1948, about \$4 million worth of raw furs were taken out of Alaska; and conservative estimates place the on-the-hoof value of the Territory's game animals at about \$150 million.

LOST

A liver and white colored springer spaniel female. The dog strayed from home on April 10 and was last seen in the vicinity of Dillsburg, R. D. 3. A suitable reward is offered for any information leading to recovery. Notify William Borchers, R. D. No. 3, Dillsburg, Pa.



Employees of the Game Commission respond generously to requests of worthwhile organizations for funds. Mrs. Dorothy E. Sheesley, Secretary to the Director of the Administration Bureau cheerfully makes solicitations in the Harrisburg office. During 1948 and to May 1, 1949, Harrisburg employees of the Commission exceeded quotas set for them in seven drives for funds. Here Mrs. Sheesley is receiving a donation from Comptroller N. E. Slaybaugh for the American Cancer Society.



WILLIAM C. ACHEY

Latest addition to the Commission's Quarter Century Club is Game Protector Bill Achey, Weatherly, who completed 25 years of continuous service on June first. Members of the Tri-Valley Outdoor Club of Weatherly have planned a testimonial banquet for Mr. Achey in honor of his outstanding service to the sportsmen of the Carbon County region.

Mexico Making Progress in Conservation

Dr. Ira N. Gabrielson, president of the Wildlife Management Institute, recently visited Mexico and reports that he is greatly encouraged by the growth in the conservation sentiment in Mexico in the last 10 to 12 years. While the total number of those interested in conservation is still small, it is many times the number that existed on previous visits which began about 1937. He found both authorities and private citizens interested in conservation of wildlife and eager to secure sound conservation material which could be translated into Spanish and used in the admittedly tremendous job of education which they face in Mexico. The Institute has arranged to supply all available information in order that the educational movement may gather as much momentum as possible.

This will be a long-time job since there is still a high percentage of illiteracy among the Mexican people and many of the Indians still live under primitive conditions. Any conservation education program must be sustained for many years to accomplish results. The growing interest in conservation on the part of officials, university people, and private citizens, however, indicates that there is now an excellent chance that such a program will grow and will become a permanent part of the educational effort in that country. Mexican officials freely admit the shortcomings of their present conservation movement, Dr. Gabrielson said, but the determination of these men to do something about the problem in the face of tremendous obstacles lends encouragement for the future.

NOTICE ON BOUNTY RATES

(Excerpt from Official Minutes of April 21, 1949)

RESOLUTIONS

WHEREAS, Reports indicate that the population of some species of predators is considerably lower than it was several years ago, and it is now believed that greater damage is being done by great-horned owls and goshawks than has been recognized previously. Therefore, further incentives are deemed necessary to bring certain species under control; and

WHEREAS, The Predator Control Committee of the Commission has given the matter study and recommends that the present bounty rates be continued to and including July 31, 1949, that from August 1, 1949, until May 31, 1950, there shall be no bounty on red foxes, and that for the last mentioned period the rates on great-horned owls and goshawks, and their fledglings, shall be increased, as hereinafter specified; and

WHEREAS, The Commission is of the opinion that it is desirable to adopt the recommendations of its committee;

THEREFORE, BE IT RESOLVED, That the Pennsylvania Game Commission, acting under the power and authority vested in it by the provisions of Article XI, Section 1101, of the Game Law, by resolutions adopted this twenty-first day of April, 1949, hereby continues from June 1, 1949, to July 31, 1949, both dates inclusive, the bounty payments currently authorized, and from August 1, 1949, until May 31, 1950, both dates inclusive, the bounty rates hereinafter specified, for the birds and animals enumerated below, if killed in a wild state in any county of the Commonwealth during the periods specified and presented in the manner and under the conditions stipulated in the Act aforesaid, except that no bounty shall be paid for either gray or red foxes killed in the counties of Chester and Delaware (where a special Act of the General Assembly restricts the killing of foxes to the protection of personal property), the rates of payment to be as follows:

BOUNTIES FOR PERIOD FROM JUNE 1, 1949, TO AND INCLUDING JULY 31, 1949.

1. *Gray Fox*—\$4.00 for each gray fox, except as indicated.
2. *Red Fox*—\$4.00 for each red fox, except as indicated.

3. *Weasel*—\$1.00 for each weasel.
4. *Great-horned Owl*—\$4.00 for each adult great-horned owl, and \$2.00 for fledgling which has not left the nest.
5. *Goshawk*—\$2.00 for each adult goshawk, and \$1.00 for fledgling which has not left the nest.

BOUNTIES FOR PERIOD FROM AUGUST 1, 1949, TO AND INCLUDING MAY 31, 1950.

1. *Gray Fox*—\$4.00 for each gray fox, except as indicated.
2. *Red Fox*—None.
3. *Weasel*—\$1.00 for each weasel.
4. *Great-horned Owl*—\$5.00 for each adult great-horned owl, and \$2.50 for fledgling which has not left the nest.
5. *Goshawk*—\$5.00 for each adult goshawk, and \$2.50 for fledgling which has not left the nest.

BE IT FURTHER RESOLVED, That if and when by act of assembly, decision of the Court, or opinion of the Department of Justice, it shall be held lawful to kill foxes in Chester County and/or Delaware County for bounty purposes, that the bounty payable therefor shall be as herein provided; and

BE IT FURTHER RESOLVED, That the foregoing resolutions shall be duly published in accordance with Section 1102 of Article XI of the Act aforesaid in the June issue of the PENNSYLVANIA GAME NEWS, also to be brought to the attention of the public by news release and other sources of public information; and

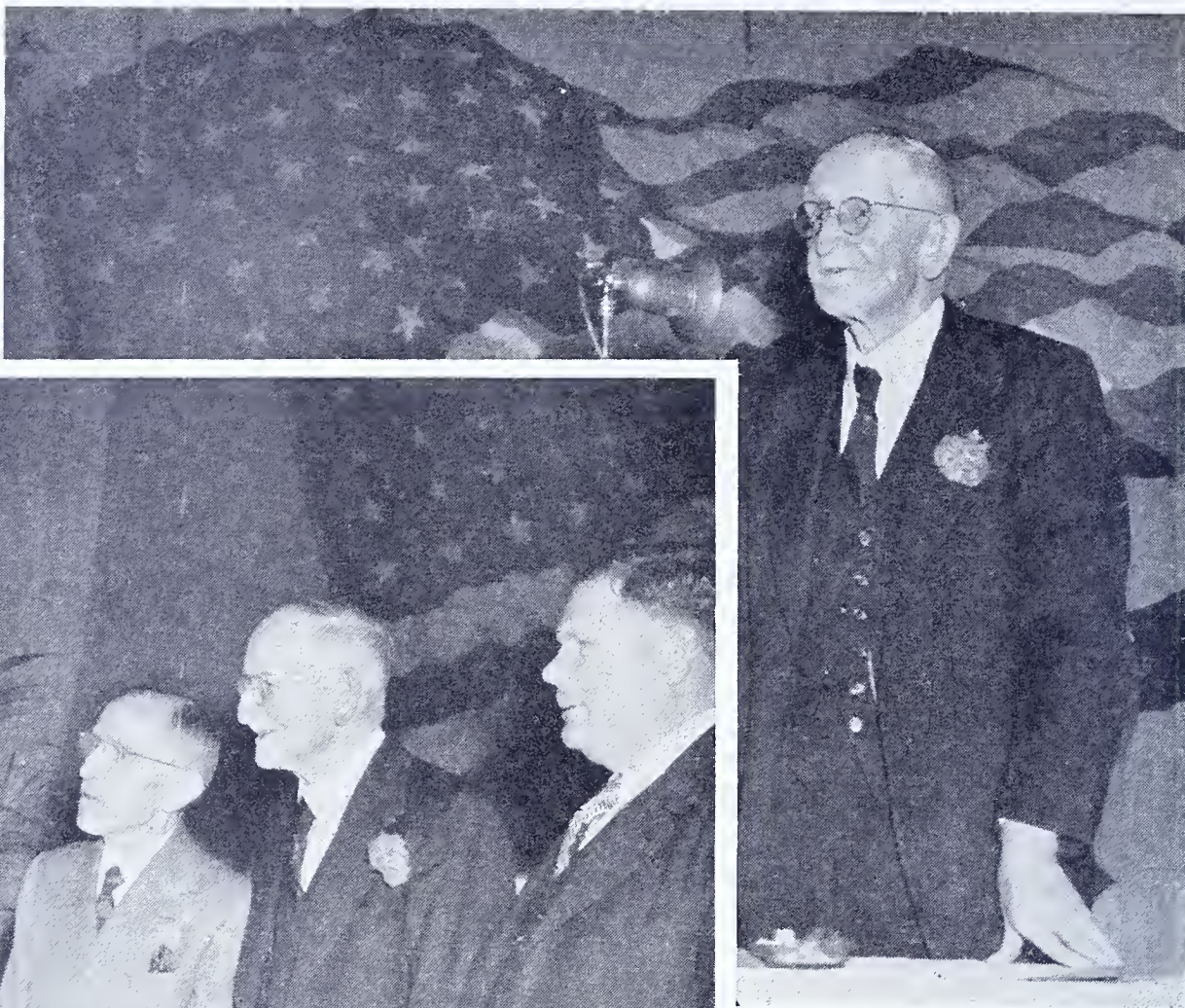
BE IT FURTHER RESOLVED, That the Executive Director is hereby authorized and directed to certify the foregoing as an act of the Pennsylvania Game Commission.

I hereby certify the above to be a full, true and correct copy of the resolutions establishing bounties on certain predators killed in a wild state within the Commonwealth from June 1, 1949, to May 31, 1950, inclusive, as adopted by the Pennsylvania Game Commission at a meeting held April 21, 1949, notice of which action is published in accordance with the requirement of law.

Thos. D. Frye,
Executive Director
Pennsylvania Game Commission

J. Q. CREVELING HONORED BY UNITED SPORTSMEN OF PENNSYLVANIA

A testimonial to J. Q. Creveling, dean of Pennsylvania Sportsmen and father of the Game and Fish Codes, was held in Wilkes-Barre on April 8. Right: Mr. Creveling addressing the gathering of prominent sportsmen and Fish and Game Commission officials.



Left: Commissioner H. E. Kilgus, left, Mr. Creveling, and Commission Division Supervisor Carl B. Stainbrook, right, admire a plaque naming the Creveling Lakes in his honor which was presented by the United Sportsmen.

Plaque Presented for Creveling Lakes Named in Honor of Former Commissioner

J. Q. Creveling, Esquire, Dean of Pennsylvania Sportsmen and father of the Game and Fish Codes was singularly honored at a testimonial banquet held in Wilkes-Barre on April 8. Highlighting the ceremonies was the presentation of a bronze plaque by the United Sportsmen of Pennsylvania to be erected on State Game Lands 157 in Wyoming County near three lakes recently named in Mr. Creveling's honor. Prominent speakers on the program included Hon. W. Alfred Valentine, Pennsylvania Game Commissioners B. K. Williams and Dr. H. E. Kilgus, Commission President Ross L. Leffler, and Fish Commissioner Paul Bittenbender. Hon. Luther M. Kniffen, Mayor of Wilkes-Barre City, served as master-of-ceremonies.

Mr. Creveling served as a member of the Pennsylvania Game Commission from March 19, 1932 until May 6, 1937. He was its elected vice-president from January 3, 1935 until his resignation in 1937. The prominent attorney helped write the first Game Code in 1923 and also was instrumental in revising the Code in 1927. He has maintained a life-long interest in sportsmen's affairs and has been an outstanding leader in the wildlife conservation movement in Pennsylvania.

FWS Regional Director In Boston Dies After Long Illness

On learning of the death of John Pearce, regional director of the Fish and Wildlife Service in the northeastern states, Service Director Albert M. Day said, "The Service has lost one of its most able young executives and key administrators. His death is a great shock to all of us and means a great loss, both personally and officially. His service has been of outstanding merit."

Mr. Pearce died Friday night, April 8 at his home, 131 Cottage Street, Natick, Mass., after an illness of many months.

Mr. Pearce had been associated with the Fish and Wildlife Service since March 1, 1937, and had been a regional director since January 1946. In this capacity he had directed field activities of the Service's Region 5 which comprises the states of Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, Delaware, New Jersey, New York, Pennsylvania, Ohio, Maryland, Virginia, and West Virginia.

John Pearce was born on May 16, 1908, in Manchester, England. At the age of three his parents brought him to the United States where he attended grammar schools in Rhode Island and New York.

In May, 1935 he was appointed as a junior

biologist with the U. S. Forest Service at Warren, Pa. In March 1937 he transferred to the Fish and Wildlife Service to conduct biological research in the New England states, with headquarters at New Haven, Conn. In 1941 Pearce was transferred to Orono, Maine, to become associate biologist in charge of the Cooperative Wildlife Research Unit at the University of Maine. A year later he became regional inspector of Federal Aid in Wildlife Restoration Activities in Region 5 and served in that capacity until his promotion to assistant regional director in March 1945. In January 1946 he became regional director, succeeding the late S. Barry Locke.

THINGS YOU MAY NOT KNOW

Several species of plant aphids are known as "ant cows." The ants carry them about and protect them, consuming a secretion of fluid which they yield.

* * *

Snakes and fish have ears but these ears have no outside openings. They "hear" mostly through vibrations in the ground or water.

* * *

Once he gets up and straightens away, the pheasant flies faster than the grouse.



GUN DOG, CONSERVATIONIST

By HERBERT KENDRICK

WORKING closely with game conservationists in an effort to supply more game for more hunters has made me highly conscious that reducing bag limits and propagating birds will not entirely guarantee us a plentiful game supply in the future. Farmers, industry leaders, research technicians, sportsmen, and good dogs must all work diligently with the conservation commission to insure our future fun afield.

The importance of well trained dogs in the field of game conservation has been brought out recently by many national sports writers. Dr. Ralph E. Yeatter, Game Specialist, Section of Game Research and Management, Natural History Survey Division, Urbana, Illinois, has written an excellent pamphlet entitled "Bird Dogs in Sport and Conservation." This booklet can be obtained free by requesting it from the address above. This publication pays high tribute to the gun dog for his ability to increase the enjoyment of his master's sport, save cripples, and his fine work in finding game for the research men who study game.

I am certain that the majority of gunners would be greatly surprised if they actually knew how many crippled birds die in the field every year. The well trained gun dog can reduce those losses and at the same time furnish his master many thrilling and heart warming experiences. The gunner who hunts with a dog will find that his chances of making clean kills are much better if he is forewarned by the dog's point that a bird will take the air.

Thoughtful sportsmen and conservation officials are deeply concerned over the enormous waste of crippled game. Game lost by crippling means more game killed or wounded by hunters in an effort to complete the daily limit.

To me the retrieve is by far the most beautiful part of hunting. It represents to me a completed job, and the great thrill of shooting a bird is not destroyed by the sickening feeling of leaving a cripple in the field.

Trained dogs are now called upon to use their talents in a new field. Game research departments are constantly conducting field surveys on pheasant, quail, woodcock and grouse. Without the aid of good dogs this valuable work could not be possible. All of you know of the great woodcock research work Dr. Logan Bennett conducted with the aid of famous "Pat."

Managers of game preserves constantly take a game census with their dogs to keep themselves informed of game population and conditions. The dog can accomplish this feat far more accurately than the greatest human field expert.

Far too many Pennsylvania gunners go into the fields each year without a dog, when the dog logically belongs second only to the game bird itself, because he is by far the most important adjunct to the sport of hunting. The upland gunner can easily buy a new gun, car, clothes, improved ammunition all on short notice, but the process by which he possesses a fine, well trained

(Continued on Page 24)

CROW SHOOTING

By TED TRUEBLOOD

IT IS unfortunate that a hunter, unlike an angler, can't eat his cake and have it, too. The fisherman can catch a trout or bass, enjoy all the thrills of hooking and playing it, and then turn it loose. He knows that it will survive to be caught another time. When we shoot a grouse or pheasant, however, it is dead, and nothing we can do will put it back into the cover again.

While we can't put back the birds that we have killed, there are things we can do to assure others being there next season. One of them is shooting crows. Crow shooting is a two-barreled proposition: They destroy countless game and song bird eggs, so killing them is well worth while from the conservation standpoint, and it is just as much fun to hunt them as it is game birds. Certainly, not since the days of market hunting could anyone do the shooting at ducks or upland birds that he can today at crows.

There are many ways to hunt them. One evening last February, four of us, shooting a roost, burned up 17 boxes of shells and estimated that we killed at least 200 crows. The shooting was so fast most of the time that it was impossible to count the hits. At least 10,000 birds were using the roost, and each time the big flock dropped in we emptied our guns. Sometimes we were able to reload and empty them a second time. We used our calls and brought them back again and again from shortly after sunset until it was too dark to shoot.

Of course, when you shoot a roost the crows move. Then, if you want to shoot the same flock again, you have to locate the new roost, which may be several miles away. More shooting, although it never is as fast, can be enjoyed by hiding on the flyway half a mile or so from the roost and taking the crows as they come in. They will continue to sleep in the same clump of trees as long as you don't shoot too close to it. Both of these methods obviously can be used only during the late fall, winter and early spring when the crows are in big flocks.

Another system that works well then calls for the use of decoys, a stuffed owl and a blind. The setup is made along a flight lane between the roost and feeding area, and the shooting lasts all day.

As far as I am concerned, however, the most enjoyable crow shooting requires no elaborate setup. Nothing is needed but your car, gun, shells and a call. It can be done during any month of the year, but June is best. The young crows are just coming off the nest then, and they are full of curiosity and foolishness.

Drive along a back road until you come to a spot where fields are bordered by the woods. A cornfield nearby always is pretty good assurance that there will be crows in the neighborhood. Park your car under the concealment of a spreading tree, if possible. Close the doors quietly when you leave it, and don't do any loud talking. Walk 50 or 75 yards from the car and select a spot where you will be reasonably well concealed but still can

(Continued on Page 24)

VITAMIN A FOR BOBWHITE QUAIL

(From Page 9)

for 4 to 6 weeks on this diet without showing signs of avitaminosis A should be used for producing the next year's progeny.

Experimental

The investigations reported here were conducted in order to obtain more information about the storage of vitamin A in bobwhite quail livers. The hatching and rearing phases of the experiments took place at the Eastern Game Farm of the Pennsylvania Game Commission, Schwenksville, Pa., under the direction of V. T. Warfel, farm superintendent.

All quail were brooded in 2 long brooder houses until 6 weeks of age. Brooder house pens were 3' x 7' x 12" high with outside runs 3' x 8' x 12". The inside pen floors were 3 mesh-per-inch hardware cloth supported over metal droppings pans kept covered with shavings. The outside floors were 2 mesh-per-inch hardware cloth without pans. Each pen was equipped with similar electric heating units, feeders, and fountains. At six weeks of age the quail were transferred to wire floored holding pens where the birds were kept until the close of each experiment. In so far as possible, management was the same for all pens. The only deliberate variable was the amount of vitamin A mixed in the ration.

Since the game farm was 180 miles distant from The Pennsylvania State College, observations by the writer were limited to weekly or bi-weekly visits. All feed was mixed by him at the College Poultry Farm on the day preceding a game farm visit. By this procedure loss of vitamin A during storage was held to a minimum. Feed consumption was not recorded.

The analytic phase of the experiments was conducted at The Pennsylvania State College in the poultry nutrition chemical laboratory. With a few slight variations, livers of the quail were assayed for vitamin A by the Carr-Price colorimetric method as outlined in *Methods of Vitamin Assay* (1947).

Experiment I

In May, 1948, 600 bobwhite quail hatched at the game farm were divided into two equal groups. Group 1 was fed 3,000 I.U. and group 2 was fed 6,000 I.U. of vitamin A per pound of feed. An equal number hatched in July was divided into two equal groups (groups 3 and 4) which received the same two levels of vitamin A.

The level of 3,000 I.U. of vitamin A per pound of feed was chosen because Nestler had found this to be adequate for normal growth and maintenance of young quail. No reports of liver storage of vitamin A in chicks fed 3,000 I.U. were available at the time of this experiment. Since 3,000 I.U. had supported good growth in quail, it was hoped that twice that amount would provide enough to permit storage of a reasonable quantity in the livers.

The composition of the basal ration used in this work is given in Table I. This ration is mash mixture 14 as reported in *Rations for Bobwhite Quail* (1944) by Stadelman, Callenbach, Murphy, and Boucher, with the exception that substitution was made for the ground yellow corn and the alfalfa leaf



Portrait of a gentleman—the bobwhite quail, cheerful whistler along country lanes.

meal because of their pro-vitamin A content. The source of vitamin A used in this experiment was black cod fish liver oil having a potency of 101,500 I.U. per gram. The oil dissolved in cottonseed oil was hand mixed into the basal ration in amounts that provided the levels of 3,000 I.U. and 6,000 I.U. of vitamin A per pound of feed. Feed was mixed weekly throughout the summer months.

At hatching, liver samples were taken for vitamin A assay of the day-old quail. In groups 1 and 2, vitamin A assays were made every 2 weeks to 16 weeks of age. For groups 3 and 4, assays were made weekly to 4 weeks and then at 8, 10, 12, and 14 weeks of age. At times of assay samples of quail were taken by random selection and brought to State College. The next morning the quail were killed, their livers removed, and the vitamin A content determined. Thus, the birds were without feed or water for about 18 hours before being weighed and killed.

Large numbers of quail were needed for assay at early ages because of small liver size. One hundred and eighty chicks were used in the day-old assay. The number decreased until only 10 were used at 10, 12, 14, and 16 weeks of age.

In July, an additional group of pedigreed quail from 23 matings was hatched. The chicks in this group were all banded with canary bands and then placed on a diet containing 3,000 I.U. of vitamin A per pound of feed. At 4 weeks of age the canary bands were replaced with regular quail bands. The quail were fed the 3,000 I.U. diet until 16 weeks of age. All were then killed and their livers sorted by family groups. Vitamin A assays were run on composite samples of livers of the families.

Results and Discussions

Tables II and III give vitamin A assay results for groups 1, 2, 3, and 4. There was little difference in body weight between groups fed the 2 levels of vitamin A. Mortality was low and similar for all groups.

Groups 1 and 3, fed 3,000 I.U. of vitamin A per pound of feed, showed little liver storage of the vitamin until 14 weeks of age. However, groups 2 and 4, fed 6,000 I.U. of vitamin A, showed very appreciable liver storage as early as 4 weeks. There was little variation in storage between groups 1 and 3 throughout the entire experiment. For reasons unknown, a considerable difference was found between groups 2 and 4. This difference, however, is relatively small in comparison with the

greater difference between results secured from the two levels of A.

Thus it has been shown that considerable vitamin A in the ration, above the amount needed for acceptable growth and livability, is required for appreciable liver storage.

It was interesting to note that chicks from the May hatch had an original liver content of 51 I.U. whereas, chicks from the July hatch had a content of only 30 I.U. of vitamin A per gram of liver. Since the dams had laid from 36 to 66 eggs between the two hatches it may be assumed that the late hatched chicks were lower in initial vitamin A content as a result of depletion of the dam's supply during egg production.

Assay results for the pedigreed quail are given in Table IV. Total vitamin A stored in the livers ranged from 71 to 439 I.U. Vitamin A per gram of liver varied from 12 to 83 I.U. The highest total liver storage was thus almost 6 times the smallest, while the storage per unit weight of liver varied by about 7 times. Such divergent results, suggest that the storage of vitamin A is an inherited factor.

A very interesting fact was noted when the results of assays were averaged by groups according to liver weight. These results are tabulated below.

Range in Liver Weight gm.	Total Vitamin A I.U.	Vitamin A per Gram of Liver—I.U.
4.4 to 5.1	250	57
5.1 to 5.8	207	34
5.8 to 6.6	167	28

The figures show that the smaller the liver size the greater the storage of vitamin A per unit of liver weight. This means that the amount of vitamin A stored in the livers was indirectly proportional to liver weight.

Experiment II

To test a ration almost completely deficient in vitamin A, two groups of 50 quail each were brooded in the summer of 1948 on the College Poultry Farm. One group was fed the regular quail ration used at the Eastern Game Farm. The other group was fed the low vitamin A basal diet used in Experiment III.

Within 2 weeks all 50 chicks fed the low A basal diet died from vitamin A deficiency. External symptoms were largely indefinite but autopsy showed characteristic lesions. The group fed the regular ration lost 13 chicks during the same 2 weeks but these deaths were due to faulty management and in no case were there any symptoms or lesions of vitamin A deficiency. This work indicates that quail chicks cannot long survive on a diet seriously deficient in vitamin A.

Summary

1. Growth of quail chicks during a 16-weeks experimental period was approximately the same for groups fed 3,000 and 6,000 I.U. of vitamin A per pound of feed. However, the liver storage of vitamin A was very much greater in the 6,000 I.U. group.
2. Liver storage of vitamin A in families of pedigreed quail varied from 71 to 439 I.U. of the vitamin per liver in chicks 16 weeks of age. Variation in vitamin A concentration per gram of liver varied from 12 to 83 I.U. These results support the theory that ability to store vitamin A is an inherited characteristic.

3. Concentration of liver storage of Vitamin A in 16-week old quail chicks was inversely proportional to liver size.
4. All quail chicks in a group fed a vitamin A deficient diet died from avitaminosis A within a 2-week period.

Literature Cited

- Association of Vitamin Chemists, Inc., 1947. Methods of Vitamin Assay. Interscience Publishers, Inc., New York.
- Carr, F. W. and E. A. Pierce, 1926. Color Reaction Attributed to Vitamin A. Biochem. Jour. 20: 487-501.
- Guilbert, H. R. and W. R. Hinshaw, 1934. Vitamin A Storage in the Livers of Turkeys and Chickens. Jour. Nutr. 8: 45-56.
- Latham, R. M., 1947. Selection of Bobwhite Quail Breeders. Memo. to Div. of Research & Planning, Pennsylvania Game Commission.
- Nestler, R. B., 1945. Visceral Gout A Symptom of Avitaminosis. Jour. Wildlife Mgt. 9: 255.
- Nestler, R. B., 1946. Vitamin A, Vital Factor in the Survival of Bobwhites. Trans. Eleventh North America Wildlife Conference: 176-195.
- Nestler, R. B., 1947. Personal Correspondence. December 7.
- Nestler, R. B. and W. W. Bailey, 1943. Vitamin A Deficiency in Quail. Jour. Wildlife Mgt. 7: 170-173.

TABLE I

Composition and Chemical Analysis of Basal Ration

Ingredient	Amount in Pounds	Chemical Analysis Per Cent
Ground wheat	11.5	5.69
Wheat bran	10.0	27.85
Wheat standard middlings	10.0	5.04
Ground oats	10.0	5.76
Soybean oil meal	40.0	1.76
Meat scrap	5.0	.91
Dried whey	5.0	
Brewers' dried yeast	5.0	
Ground limestone	2.5	
Salt	.5	
D-activated animal sterol	.05	
Manganese sulfate	.025	
Cottonseed oil	.5	
Total	100.075	

TABLE II
Average Growth, Liver Weight, and Liver Storage of Vitamin A in Bobwhite Quail Chicks Hatched May 27, 1948

Group 1—3,000 I.U. of Vitamin A per Pound of Ration				I.U. of Vitamin A per Gram of Liver
Age wk.	Body Weight gm.	Liver Weight gm.		
0	5.6	.11		51
2	21.4	.56		0
4½	57	1.43		9
6	78	1.67		17
8	113	2.82		10
10	133	3.48		8
12	148	3.51		20
14	156	3.70		41
16	157	3.43		55

Group 2—6,000 I.U. of Vitamin A per Pound of Ration				I.U. of Vitamin A per Gram of Liver
Age wk.	Body Weight gm.	Liver Weight gm.		
0	5.6	.11		51
2	20.2	.60		20
4½	60	1.51		53
6	79	1.73		112
8	115	2.88		147
10	133	3.55		129
12	145	3.31		234
14	158	3.84		240
16	147	3.30		204

TABLE III

Average Growth, Liver Weight, and Liver Storage of Vitamin A in Bobwhite Quail Chicks Hatched July 29, 1948

Group 3—3,000 I.U. of Vitamin A per Pound of Ration				I.U. of Vitamin A per Gram of Liver
Age wk.	Body Weight gm.	Liver Weight gm.		
0	5.7	.16		30
1	9.5	.30		4
2	21	.78		3
3	32	1.01		3
4	43	1.34		3
8	106	2.84		5
10	137	4.21		5
12	140	4.57		15
14	161	....		46

Group 4—6,000 I.U. of Vitamin A per Pound of Ration				I.U. of Vitamin A per Gram of Liver
Age wk.	Body Weight gm.	Liver Weight gm.		
0	5.7	.16		30
1	7.9	.26		16
2	22	.73		32
3	30	.92		35
4	40	1.22		51
8	108	2.88		70
10	136	3.63		87
12	147	4.69		61
14	174	....		98

TABLE IV

Vitamin A Liver Assays of Pedigreed Bobwhite Quail Chicks 16 Weeks of Age

Dam No.	Average Body Weight gm.	Average Liver Weight gm.	I.U. of Vitamin A per Liver	I.U. of Vitamin A per Gram of Liver
1	173	5.87	238	41
2	183	5.94	183	31
3	171	5.33	213	40
4	169	5.33	152	29
5	166	5.17	127	25
6	163	4.90	221	45
7	162	4.96	352	71
8	182	5.56	167	30
9	177	6.64	144	22
10	172	5.50	195	36
11	168	4.60	223	49
12	173	5.05	303	50
13	174	4.43	282	64
14	121	5.70	71	12
15	166	5.98	102	17
16	174	4.91	204	42
17	180	4.60	288	63
18	167	4.86	212	44
19	174	5.01	268	54
20	163	5.29	439	83
21	170	5.18	282	55
22	179	5.09	300	59
23	152	4.78	394	83

GUN DOG, CONSERVATIONIST—from Page 21

dog is very slow and many times uncertain. Perhaps that is the reason for so many dogless hunters. To me, hunting without a dog is just not hunting at all. Any man who knows and loves bird hunting, if given the choice, would rather go into the autumn covers without his gun than without his dogs. Even in the market hunting days, which we would like to forget, the dog was a very necessary part of his outfit.

The past few years have seen the upland gunner become conscious of good dogs. In the woods and fields he has become the hunter's close associate and partner, providing all the companionship that good men require. People fail to realize the feeling that exists between the man and his dog when they learn to hunt together. Even though a hunter has friends he dearly loves to be with and with whom he hunts with pride, he does not stay home on a clear crisp day for lack of human companionship. Hunting with a good dog during the open season is the very essence of the fine sport and because the season lasts only a month many men continue to follow game with their dogs, freely contented to watch the work and continuous training with no sense of loss because the gun is left at home.

A growing interest in good dogs will be a welcome note to the men who work to supply us with game. The more interest we place on owning better dogs the more interest we shall create to have more game on which to work them. Yes, it is an accepted fact that gun dogs and conservation go hand in hand.

Make your plans now to have a finished gun dog for your next gunning season, and join the ranks of the army of sportsmen who are deeply interested in more and better game for more and better hunters.

GRAYBACK—from Page 11

tried to fasten upon the old one's neck, Scarface's fangs slid under his thrust, they closed upon Grayback's throat, his great weight sent Grayback over and down.

Grayback kicked and twisted but he could not shake the hold loose. His breath came in gasps, hot and short. As Scarface clamped tighter the breath ceased coming and Grayback's lunges became weaker. Suddenly Scarface tossed the youngster from him. Grayback rolled over and over. He lay gasping in the dew drenched grass. Scarface stood over him snarling and growling. He wet disdainfully upon Grayback, then turned and kicked sticks and dirt upon him. Grayback staggered to his feet. Instantly Scarface was on him again, smashing him down, gripping his throat, and shaking him. Grayback was limp as a wilted weed when Scarface released him. This time Scarface turned his back trotted toward the Slim One, sure his prowess would be appreciated. She stared at him but did not move.

Grayback lay in the grass until he had recovered his breath. He knew he couldn't lick the old one, but he had no notion of giving up. He got to his feet and hastily scurried toward a thicket. He sat in the shadows licking his wounds and growling.

When he looked at the Slim One his anger mounted. But his heritage was discretion, his kind won out by cunning. He could see down into Gus' yard. He cocked an ear but heard nothing. Looking back at the Slim One he saw that she was beginning to take a decided interest in Scarface. Once the slender she-fox returned Scarface's attentions she would run at his side from then on, seeing no other dog fox.

Grayback decided upon a course of action.

He had to get Scarface away from her. This was his home ground, he knew every path and every turn, and he was faster than the old fox. Scarface was filled with rage when he saw Grayback. The insolent pup would have to be finished. He leaped toward Grayback. Grayback whirled and fled, not too fast, but fast enough to keep Scarface's fangs a foot from his brush. They shot down a steep bank, ducked along a rabbit trail, around a giant maple tree, and into a foot path. Scarface was eager to make the kill. He snarled savagely as they skidded around a cut-bank. Too late he discovered he was in the yard of a cabin. A truck stood at the door of the cabin. He might have turned back, but Grayback was almost within his grasp. Grayback, as soon as he hit the yard, let out a burst of speed which carried him away from Scarface.

When Scarface was exactly in the center of the yard Grayback let out a loud and derisive howl. His howl had hardly faded when it was answered by a chorus from a shed across the yard from the cabin. Four hounds leaped out of the shed. They saw Scarface streaking through the moonlight and gave chase.

Grayback topped the bank. He turned sharply to the right and faded into the little thicket at the top of the bank. Scarface was not familiar with the terrain, but he knew he had to reach the rough country. He headed straight out across the pear orchard.

Grayback watched from his thicket. Scarface made a valiant try, but he was not as fast as Grayback, nor did he have the lead. The hounds had broken over the hill close upon his heels. Mooch overhauled him half

CROW SHOOTING—from Page 21

see out to shoot. It does no good to hide so well that a crow can't see you if you're under a thick canopy of foliage and can't shoot them when they come over.

Tall sumac or second growth eight to ten feet high is ideal. It is better to be on a hillside than in a hollow because your call carries better from the more open position. Start calling softly, imitating a young crow that is in distress. Continue this call for half a minute or so and then, without pause, shift to the rallying call, a loud "Caw, caw, caw, caw, caw!" evenly spaced. Repeat it several times without pause. Next, shift to the angry, growling, fighting call, "Cawwww, cawwww, cawwww!" Continue the fighting call and mix in a rallying call occasionally.

By this time, if there are any crows around, some should be on their way in to get shot. Continue calling as they come. Unlike ducks, crows are more likely to veer off as the result of too little calling, rather than too much.

It is important to kill the first crow that comes over. If he gets away he will warn the others. Your call should be tied to a buttonhole so that you can spit it out to shoot and then resume calling as quickly as possible. The crows will continue to come, despite the sound of the gun, if you keep calling, but they will turn back if you stop.

Ordinarily, a couple of average shots can kill from four to a dozen crows at one stand. As soon as one wise old rascal perches in the top of a dead tree a couple of hundred yards away and begins to laugh at you, however, you might as well move on. In fact, it usually is better to leave immediately after the shooting stops and drive on a mile or so before calling again. Occasionally, however, if you remain perfectly quiet for ten minutes and then begin with the distress call of a young crow you can bring back one or two that escaped the initial bombardment.

way across the orchard. Scarface was no coward. He knew the time for discretion was past. Swerving he whirled and met Mooch, his fangs ripping a deep gash in the cheek of the hound before Mooch could get set. He leaped back, ready to slash again. He would surely have cut Mooch down to his size if the three other hounds had not piled in, swarming over him tearing at him. Scarface went down slashing and ripping under two hundred pounds of fighting dog power.

Grayback did not wait to see the end. A light had come on in the cabin, it was time for him to go. He slipped away up the slope, and ducked into a thicket. Keeping to cover he circled toward the little meadow where they had left the Slim One. Grayback hurried; he was afraid she might have taken fright at the howling of the hounds. He broke from cover into the meadow and slowed his pace. She was still sitting on the little mound.

Running toward her Grayback yelped eagerly, proudly. She turned her head and looked at him. Her jaws opened and her little tongue lolled over her teeth. The smile sent Grayback racing around her.

Having circled the lady twice Grayback charged at her, stopped and yelped eagerly. Then he whirled and ran from her. The Slim One jumped down from her perch. With a soft yelp she raced after him. Side by side, shoulder to shoulder, they raced across the meadow, up toward the top of their ridge. On and on they ran, through patches of white moonlight and pools of dark shadow, on toward a rendezvous on a lonely point overlooking the wooded slopes, and hills of Pennsylvania.

PRINCE OF PESTS—from Page 3

fields. But where are the quail? Audubon and Wilson reported no shortage in their season, although there were many more foxes, hawks and owls then than there are now. Perhaps the prince of pests can supply the answer. We must make our own decision. Do we want cats, or ground-nesting birds in this nation?

Frankly, I believe that, if vagrant cats were to be eliminated, we could double the take of pheasants in some states next season. This may seem to be hard to support, but I am convinced that anyone can check it on close observation. One pheasant hen that I watched closely last spring raised only one chick from the twelve that she led when I first saw her. Two of these were eaten by one cat that I autopsied. One of them was caught by a roving dog; and the rest, I am convinced, vanished into the jowls of felines which dogged that hen throughout the rearing season.

Among numerous other pheasant-cat calamities, another lives vividly in my memory. On that sad occasion, I found a mangled pheasant hen still beating in the weeds, while a pair of giant cats cleaned up her newly hatched chicks, saving the mother for later.

Depend on scientific means to destroy the rats and mice in your buildings. Do the job right; do it thoroughly, and once may be forever. Plug up the ratholes with concrete; use the new poisons that cause a

pulmonary edema. There will be plenty left for those that move in later. Don't be lazy and depend on the cat to do the job for you. His price is too high for the kind of work he produces. A pair of barn owls would do a real job on the mice in your outbuildings, but a pair of barn owls are hard to find in these murderous days in this country. A cat is not in the same league with the owl as a mouser. Even the hated Cooper's hawk, the "chicken hawk", can outcatch the cat as a ratter.

Farmers would do well to replace their shotgun with a rifle. A .22 will kill more potential chicken and duck stealers than any shotgun. Cats and roving dogs will make a shambles of a hen yard at any time of the year. The pampered cat messes up a pullet exactly like a weasel, and she does her hunting in your neighbor's barnyard. Puss wisely leaves her domestic victims in a hurry.

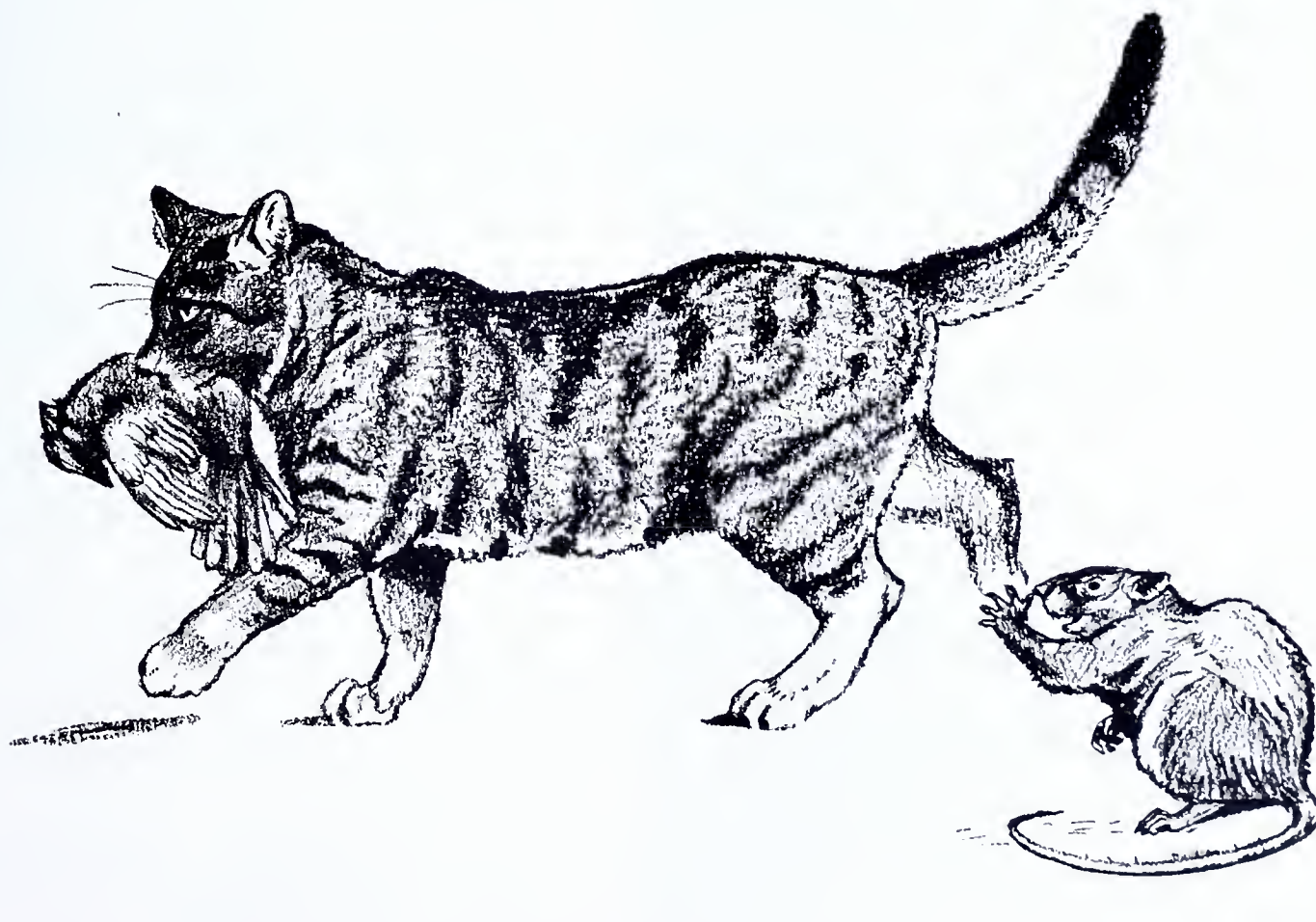
A vagrant cat and a roving dog are threats to your hunting land in any season. If we must have bounties on the best ratters—the foxes, the hawks and the owls—let's insist on a really big bounty on cats. Some of the fur buyers are offering a pretty decent price for cat hides. Here is a bounty of our own making. It shouldn't take long to skin a cat, and certainly they are more plentiful than the other furbearers. If you take the time to look inside of them, you'll soon forget your misgivings.

Colorado Senate Keeps Bear off Predator List

A bill which would have placed the bear on the state's predator list and which would have permitted anyone holding a small game hunting and fishing license to kill bears at any time was severely amended before its passage by the Colorado Senate, the Wildlife Management Institute reports.

As amended by Senator Robert A. Theobald, the bill, like the present law, permits the killing of bears by hunters holding deer and elk licenses during the big game hunting season only, except that they may be killed at any time by farmers, ranchers, or stockmen and their employees on their own or leased land if the bill becomes law. Senator Edgar W. Bray, who introduced the original measure, agreed to this amendment giving ranchers power to protect themselves from predation.

During the three-day debate on this measure, the status of the bear as a valuable asset rather than a predator was recognized by a majority of the legislators. Most of them agreed with Senator L. H. Purdy who called the bear a "good recreational resource" the existence of which would be threatened by unrestricted hunting. Conservationists will applaud the action of the Colorado lawmakers in this matter. Because some bears kill livestock, many legislators in other states have been prone to condemn the species for the activities of a few individual "outlaws" without regard for the animal's tremendous recreational value.



GAME LAW VIOLATIONS

(All persons listed by county of residence; regardless of county in which violation occurred)

Cases Settled During the Month of March, 1949

ADAMS—\$125.00

Huff, Floyd C., R. D. No. 1, Littlestown. Falsifying dates to collect bounty on four red foxes; Attempting to collect bounty on three foxes killed by another	115.00
Taylor, Fred H., Route No. 1, Biglerville. Making false declaration to collect bounty on weasel	10.00

ALLEGHENY—\$50.00

Cupec, John A., Normantown Road, Gassmere. Shooting within 150 yds. of occupied building	25.00
Rossmann, William F., Jr., 25 Fordham St., West View. Destroying tree on State Game Lands	25.00

ARMSTRONG—\$110.00

Butler, John P., Box 529, Leechburg. Hunting small game in party of six	5.00
Jordon, John A., R. D. No. 3, Dayton. Possessing beaver skin unlawfully taken	50.00
Kenmuir, Able R., Box 234, Freeport. Giving false information to secure license; Alien hunting	45.00
Nulph, Burnell W., Box 164, R. D. No. 1, Leechburg. Declaring false date to collect bounty on affidavit	10.00

BEDFORD—\$10.00

Ney, David H., R. D. No. 1, Everett. Making false declaration of date to collect bounty on weasel	10.00
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BERKS—\$35.00

Kerper, Webster E., R. D. No. 1, Birdsboro. Making false declaration of date to collect bounty on weasel	10.00
Ramich, Richard L., R. D. No. 1, West Leesport. Making false declaration of date to collect bounty on weasel	10.00
Vagnoni, Philip, 166 W. Windsor St., Reading. Dog chasing and killing rabbit in closed season	15.00

BLAIR—\$30.00

Hughes, Earl L., 106 Sixth St., Tyrone. Making false declaration of date to collect bounty on gray fox	10.00
Walk, Howard L., R. D. No. 3, Tyrone. Falsifying date of killing two weasels	20.00

BRADFORD—\$385.00

Burke, Gerald F., Sugar Run. Failure to tag trap	10.00
DeWitt, Robert E., 220 Ann St., Athens. Making false declaration of date to collect bounty on fox	10.00
Hanyen, John H., R. D. No. 1, Athens. Making false declaration of date to collect bounty on fox	10.00
Johnson, Richard M., R. D. No. 6, Towanda. Failure to tag traps set above water line; Setting trap within 25 ft. of beaver dam	100.00
O'Neil, Raymond T., R. D. No. 1, New Albany. Making false declaration of date to collect bounty on fox	10.00
Parks, Carl, R. D. No. 1, Wysox. Making false declaration of date to collect bounty on weasel	10.00
Reeves, Charles C., R. D. No. 2, Wyalusing. Setting more than ten traps for beaver; Setting trap closer than 25 ft. from beaver house	100.00
Salsman, Romaine L., R. D. No. 1, Towanda. Possessing shotgun in vehicle in motion along highway	25.00
Schaffener, Walter R., Montague St., Canton. Making false declaration of date to collect bounty	10.00
Walborn, Donald M., R. D. No. 2, Towanda. Attempting to defraud Commonwealth by giving wrong dates on 10 weasels ..	100.00

BUCKS—\$75.00

Weatherill, George H., Radcliff St., R. D. No. 1, Bristol. Killing male ringneck pheasant in closed season; Killing pheasant on Sunday; Shooting within 150 yds. of occupied building	75.00
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CAMBRIA—\$20.00

Macchioni, Guilio, Clover. Dogs chasing small game in closed season	10.00
Stevanelli, Emil, Box 495, Spangler. Dogs chasing small game in closed season	10.00

CAMERON—\$100.00

Howlett, Joh, Cameron. Shooting at and attempting to kill deer by artificial light	100.00
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CENTRE—\$455.00

Charnick, Andrew F., Clarence. Setting traps closer than 25 ft. from beaver dam	50.00
Dell, Richard E., Philipsburg. Possessing doe deer taken in closed season	100.00
Evans, David R., 523 So. Allen St., State College. Hunting without resident license	20.00
Fergusah, James H., 523 So. Allen St., State College. Hunting without resident license	20.00
Holt, Walter E., Moshannon. Taking muskrat in closed season ..	10.00
Hoy, Robert A., R. D. No. 2, Howard. Killing ringneck pheasant on Sunday; Killing ringneck pheasant in closed season	50.00
Meeker, William T., Moshannon. Setting trap closer than 25 ft. from beaver dam	50.00
Minaichick, John A., R. D. No. 1, Philipsburg. Aiding and assisting to collect bounty on weasel by deception	25.00
Mumau, Guy C., Glen Campbell. Taking muskrat in closed season ..	10.00
Mumau, Roy J., Glen Campbell. Setting trap closer than 25 ft. from beaver house	50.00
Sharp, William A., R. D. No. 1, Bellefonte. Failure to tag trap ..	10.00

Raylor, James L., 523 S. Allen St., State College. Hunting without resident license	20.00
Wallace, Bruce M., 523 S. Allen St., State College. Hunting without resident license	20.00
Whittman, Herbert G., 523 S. Allen St., State College. Hunting without resident license	20.00

CHESTER—\$40.00

Keen, Leonard C., R. D. No. 1, Spring City. Failure to display license while hunting	20.00
Zollers, Warren A., 240 New St., Spring City. Failure to display license while hunting	20.00

CLEARFIELD—\$310.00

Greene, George C., Bigler. Setting trap closer than 25 ft. from beaver house	50.00
Jury, Harry J., 516 Sixth St., Clearfield. Possessing loaded rifle in vehicle in motion on highway	25.00
Miller, Robert J., R. D., Frenchville. Setting trap closer than 25 ft. from beaver house	50.00
Smith, James, R. D. No. 1, Penfield. Possessing live raccoon without permit; Possessing deer taken in closed season	125.00
Stevenson, David, Irvona. Making false declaration of date to collect bounty	10.00
Whitaker, Fred M., Curwensville. Setting more than 10 traps for beaver	50.00

CLINTON—\$200.00

Harback, William B., Loganton. Shooting at human being in mistake for game	200.00
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COLUMBIA—\$25.00

Borak, John, R. D. No. 1, Catawissa. Alien possessing firearms ..	25.00
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DELAWARE—\$125.00

Bixler, Clarence, 152 Third St., Upland. Setting two traps within 25 ft. of beaver dam	100.00
Riddle, William, Walter Rd., Glen Mills. Killing ringneck pheasant in closed season	25.00

FAYETTE—\$120.00

Fike, John E., R. D. No. 1, Farmington. Making false declaration of date in attempt to collect bounty	10.00
Lee, Raymond R., R. D., Farmington. Possessing doe deer taken in closed season	100.00
Zinsky, John, R. D. No. 1, Normanville. Making false declaration of date to collect bounty	10.00

GREENE—\$10.00

Weaver, Ray, R. D. No. 1, New Freeport. Making false declaration of date to collect bounty	10.00
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INDIANA—\$40.00

Evans, Wilford N., 1643 Philadelphia St., Indiana. Making false declaration of date to collect bounty	10.00
Miller, Victor J., R. D. No. 2, New Florence. Making false affidavit to collect bounty on two weasels	20.00
Reba, Nick, Box 186, Heilwood. Making false affidavit to collect bounty	10.00

JEFFERSON—\$10.00

Wells, Burton B., R. D. No. 2, Reynoldsville. Setting steel trap with jaw spread exceeding 6½ in.	10.00
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JUNIATA—\$202.00

Lauver, Mrs. Charles W., R. D. No. 2, Mifflintown. Possessing deer taken in closed season	100.00
Lauver, Charles W., R. D. No. 2, Port Royal. Possessing deer taken in closed season; Failure to report killing deer within five days ..	102.00

LANCASTER—\$50.00

Irvin, Paul M., R. D. No. 1, Lititz. Making false affidavit to collect bounty on gray fox	25.00
Sweigart, Kenneth R., R. D. No. 2, Denver. Making false affidavit to collect bounty on weasel	25.00

LEBANON—\$25.00

Krail, Allen I., R. D. No. 1, Lebanon. Possessing loaded rifle in vehicle in motion along highway	25.00
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LEHIGH—\$10.00

Mosser, Charles H., R. D. No. 1, New Tripoli. Making false declaration of date to collect bounty on fox	10.00
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LUZERNE—\$255.00

DeMoy, Henry, R. D. No. 1, Pittston. Possessing parts of deer during closed season	50.00
Johnson, Floyd E., 1129 Water St., Moosic. Failure to properly tag beaver trap; Attempting to take beaver in closed season ..	100.00
Kutyana, Albert, 423 W. 6th St., W. Wyoming. Hunting without resident license	20.00
Renaud, Richard C., R. D. No. 1, Nescopeck. Making false declaration of date to collect bounty on weasel	10.00
Yadrnak, Daniel, 422 Owens St., Swoyerville. Hunting within 150 yds. of occupied building	25.00
Zimniski, William, 739 N. Walnut St., Luzerne. Setting trap closer than 25 ft. from beaver house	50.00

LYCOMING—\$10.00

Holt, Orvis C., 150 E. Church St., Williamsport. Failure to tend traps within 36 hours 10.00

McKEAN—\$249.00

Russell, Ray R., R. D. No. 2, Eldred. Possessing parts of deer taken in closed season 99.00
1 day

Perry, Todd S., Kings St., Eldred. Attempting to take bounty on five New York State foxes 125.00

MIFFLIN—\$10.00

Kurtz, George R., Milroy. Attempting to collect bounty on weasel after four month period 10.00

MONTGOMERY—\$105.00

Boswell, Ruby W., 651 Beech St., Pottstown. Dog chasing rabbits & pheasants in closed season 10.00

Clemens, Lawrence Z., Harleysville. Possessing loaded rifle in vehicle standing along highway 10.00

Cuff, John W., Skippack. Dogs chasing small game in closed season 10.00

Elmore, William M., Hildale Rd. A-8B, Pottstown. Dog chasing rabbits in closed season 10.00

Jackson, Robert E., 614 Beech St., Pottstown. Dog chasing small game in closed season 10.00

Jordan, Wilhelm O., Garden Ave., Horsham. Dog chasing and killing rabbit in closed season 15.00

Pennypacker, Lester L., 661 Beech St., Pottstown. Dog chasing rabbits and pheasants in closed season 10.00

Pollock, Aubrey W., 443 Highland Rd., Pottstown. Dog chasing small game in closed season 10.00

Simmons, George, R. D. No. 3, Pottstown. Dogs chasing small game in closed season 10.00

Ward, Henry, C., 325 Grant St., Pottstown. Dog chasing small game in closed season 10.00

NORTHAMPTON—\$25.00

Reisenwitz, Aaron S., R. D. No. 1, Bangor. Killing male ringneck pheasant in closed season 25.00

NORTHUMBERLAND—\$10.00

Shaffer, Edward E., R. D. No. 3, Sunbury. Making false declaration of date to collect bounty 10.00

PERRY—\$10.00

Powell, Randall D., Blain. Possessing loaded rifle in vehicle standing along highway 10.00

PIKE—\$25.00

Kiesel, Julius A., R. D., Milford. Attempting to defraud Commonwealth through collection of bounty 25.00

POTTER—\$10.00

Hosley, Vincent M., Genesee, R. D. No. 2. Making false declaration of date to collect bounty 10.00

SNYDER—\$10.00

Baker, Edward H., McClure. Making false declaration of date to collect bounty on red fox 10.00

SOMERSET—\$90.00

Champanella, Frank, Hooversville. Making false declaration of date to collect bounty on weasel 10.00

Heiple, Roy, R. D. No. 1, Friedens. Making false declaration of date to collect bounty on five weasels 50.00

Stevens, Earl L., R. D. No. 1, Boswell. Making false declaration of date to collect bounty on weasel 10.00

Zerfoss, Hilton M., R. D. No. 2, Friedens. Making false declaration of date to collect bounty on two weasels 20.00

SULLIVAN—\$60.00

Abrams, Dewitt M., Mildred. Setting more than 10 traps for beaver 50.00

Blzup, Adam P., P. O. Box 22, Lopez. Taking muskrat in closed season 10.00

SUSQUEHANNA—\$215.00

Fessenden, James D., R. D. No. 1, Birchardville. Placing tag for beaver trap below water line 50.00

Figura, Sergius, R. D. No. 2, Thompson. Setting tag for beaver trap below waterline 50.00

Flynn, Ambrose J., Birchardville. Making false declarations to collect bounty on two foxes 20.00

Frisbie, Glenn R., R. D. No. 2, Susquehanna. Possessing live raccoon without permit 25.00

Murphy, James, Little Meadows, Star Route, Friendsville. Setting trap within 25 ft. of beaver dam 50.00

Purtell, Donald L., Little Meadows. Making false declaration of date to collect bounty on one fox 10.00

Sincavich, Joe, R. D. No. 3, Meshoppen. Making false declaration of date to collect bounty on weasel 10.00

TIOGA—\$150.00

Berquist, Clarence H., R. D. No. 1, Gaines. Making false declaration to collect bounty 10.00

Campbell, Glenn B., R. D. No. 7, Wellsboro. Failure to tag trap 10.00

Freeman, Ivan A., P. O. Box 40, Crooked Creek. Making false declaration of date to collect bounty on two red foxes 20.00

Lapoint, Charles H., R. D. No. 1, Knoxville. Attempting to take more than two beaver during season 50.00

Lapoint, Joseph N., R. D. No. 2, Middlebury Center. Attempting to take more than two beaver during season 50.00

Rachel, Frank J., R. D. No. 1, Sabinsville. Making false declaration of date to collect bounty on red fox 10.00

WASHINGTON—\$25.00

Sloskey, William, R. D. No. 1, Coal Center. Entering special dog training area and disturbing game 25.00

WAYNE—\$175.00

Boots, Edward A., R. D. No. 1, Waymart. Setting trap closer than 25 ft. from beaver house 50.00

Burrier, Francis, R. D. No. 1, Waymart. Setting trap closer than 25 ft. from beaver house 50.00

Burrier, Thomas J., R. D. No. 1, Waymart. Setting trap closer than 25 ft. from beaver house 50.00

Kinney, Earl R., Gouldsboro. Attempting to defraud Commonwealth through collection of bounty 25.00

WESTMORELAND—\$20.00

Citrone, Peter J., R. D. No. 1, Box 272, Latrobe. Killing rabbit in closed season 10.00

Komorinsky, Joseph, R. D. No. 3, Box 406, Greensburg. Dog chasing rabbits in closed season 10.00

WYOMING—\$10.00

Avery, Russell G., R. D. No. 2, Dalton. Possessing loaded shotgun in vehicle standing along highway 10.00

NON-RESIDENT—\$45.00

Birney, James V., R. D. No. 1, Waverly, N. Y. Taking muskrat in closed season 10.00

Vroman, George W., R. D. No. 1, Wellsburg, N. Y. Making false declaration of date on great horned owl killed for bounty 10.00

Zeyer, Alfred, 90-12 180th St., Jamaica, N. Y. Failure to tag deer 25.00

Cases Settled During the Month of February, 1949

ALLEGHENY—\$495.00

Crouse, Peter John, 211 Oakview St., Pittsburgh 18, Pa. Killing rabbit in closed season 10.00

Gossar, Clair Leonard, 847 E. Wall Ave., Pitcairn, Pa. Failure to submit report of shooting accident causing injury to another 25.00

Gulliani, Charles, 416 West End Ave., Coraopolis, Pa. Assisting in transporting deer illegally killed 50.00

Parisi, Dominic, R. D. No. 3, Bellevue, Pa. Possessing game illegally killed 100.00

Parisi, Dominic, R. D. No. 3, Bellevue, Pa. Using a motor vehicle to transport game illegally killed 50.00

Parisi, Emma Agnes, R. D. No. 3, Bellevue, Pa. Interfering with State Officer in performance of his duty 100.00

Parisi, Julius, R. D. No. 3, Bellevue, Pa. Possessing parts of deer taken in closed season 100.00

Parisi, Julius, R. D. No. 3, Bellevue, Pa. Using a motor vehicle to transport game illegally killed 50.00

Wagner, Victor Luciene, R. D. No. 1, Tarentum, Pa. Declaring false date to collect bounty 10.00

ARMSTRONG—\$15.00

Myers, Donald (A), R. D. No. 3, Kittanning, Pa. Hunting small game in party of six 5.00

Yockey, John, R. D. No. 1, Templeton, Pa. Making false declaration of date of killing of weasel in affidavit for collection of bounty 10.00

BUTLER—\$10.00

Smolen, Walter John, 115 Lewis Ave., Lyndora, Pa. Possessing loaded rifle in vehicle on highway 10.00

CAMBRIA—\$10.00

Helsel, Jay Washington, R. D. No. 1, Mineral Point, Pa. Falsifying date on affidavit in claim for bounty 10.00

FAYETTE—\$100.00

Keffer, Levi B., R. D., Dawson, Pa. Killing a doe deer in closed season 100.00

INDIANA—\$35.00

Leitz, Lloyd Levi, R. D. No. 1, Glen Campbell, Pa. Giving wrong date to collect bounty 10.00

Pardee, Stanley, R. D. No. 1, Rochester Mills, Pa. Failure to report shooting accident causing injury to another 25.00

SOMERSET—\$65.00

Hoover, Robert Frank, Box 18, Fort Hill, Pa. Possessing live raccoon without permit 25.00

Mitchell, Herman Leroy, R. D. No. 1, Rockwood, Pa. Making false declaration of date in attempt to collect bounty 20.00

Nair, Charles Cramer, R. D. No. 6, Somerset, Pa. Making false declaration of dates to secure bounty 20.00

WASHINGTON—\$105.00

Beard, Ralph Homer, 5 Erle St., Burgettstown, Pa. Dumping rubbish on State Game Lands 25.00

Gajan, John, R. D. No. 1, Coal Center, Pa. Dog pursuing game unaccompanied by owner or trainer 10.00

McCartney, Walter Joseph, Box 8, Westland, Pa. Making false declaration on date of killing on bounty affidavit 20.00

Terchick, Anthony William, R. D. No. 1, Venetia, Pa. Disposing of a game animal without a propagating permit 25.00

Williams, Elmer Charles, R. D. No. 1, Finleyville, Pa. Possessing live raccoon without permit 25.00

WESTMORELAND—\$145.00

Bistel, James, Box 55, Jones Mill, Pa. Hunter injuring livestock. (Killing one tame turkey) 25.00

Bistel, James, Box 55, Jones Mill, Pa. Killing one wild turkey in closed season 25.00

Chew, Charles Robert, 5th St., Grapeville, Pa. Failing to visit three traps within 36 hours 30.00

Chew, Charles Robert, 5th St., Grapeville, Pa. Failing to tag trap 10.00

Crocker, John, R. D. No. 2, Leechburg, Pa. Hunting small game without a resident hunting license 20.00

Krieger, James C., Box 109, Yukon, Pa. Shooting at game (rabbit) on highway 25.00

Strohman, Clay Dean, R. D. No. 3, Alverton, Pa. Made false declaration of killing date of one weasel to collect bounty with intent to defraud the Commonwealth	10.00
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NON-RESIDENT—\$50.00

Bradley, Allen, Camp Fort Dix, Fort Dix, N. J. Possessing loaded rifle in vehicle in motion on highway	25.00
Philleps, Henry P., 629 Sidney Ave., Unionbeach, N. J. Possessing loaded rifle in vehicle in motion on highway	25.00

Cases Settled During the Month of January, 1949

ALLEGHENY—\$310.00

Baskette, James, 126 Noble Ave., Crafton, Pa. Making false statement to secure hunting license	20.00
Ciallelli, Charles, 732 Kelly St., Brushton, Pgh. 8, Pa. Failure to display license tag while hunting	20.00
Ciallelli, Charles, 732 Kelly St., Brushton, Pgh. 8, Pa. Possessing two rabbits taken in closed season	20.00
Ciallelli, Charles, 732 Kelly St., Brushton, Pgh. 8, Pa. Hunting rabbits between 5 P.M. and 7 A.M.	15.00
Ferbas, Jr., Victor, R. D. No. 1, Wexford, Pa. Removing tree from State Game Lands	25.00
Johnson, Robert, Box 22, Oakdale, Pa. Hunting within 150 yds. of an occupied building	25.00
Lieving, Oscar John, R. D. No. 1, Clinton, Pa. Failure to tag traps	30.00
McConnell, Jr., Wilson Diehl, Clinton, Pa. Hunting without resident license	20.00
McDonald, Frederick Ralph, R. D. No. 2, Coraopolis, Pa. Cutting a tree on State Game Lands	25.00
Millspaugh, Harold Robert, Box 26, R. D. No. 5, Crafton, Pa. Disturbing traps of another	25.00
Olson, Alfred John, R. D. No. 1, Clairton, Pa. Setting steel trap for muskrats in closed season	10.00
Rogers, J. Ross, R. D. No. 1, Clinton, Pa. Failure to tag traps ..	30.00
Soley, Steve, 1451 Warner St., Pittsburgh 12, Pa. Hunting without resident license	20.00
Zahorchak, Rudy, Freeport Road, Natrona Heights, Pa. Raising fur-bearing animals, namely mink, for commercial purposes without a permit	25.00

ARMSTRONG—\$55.00

Butler, George Calvin, 1044 North Grant Ave., Kittanning, Pa. Hunting small game in party of six	5.00
Clever, Richard Marlin, R. D. No. 1, Kelly Station, Pa. Setting one untagged trap	10.00
Hartman, Harry Thomas, R. D. No. 1, Ford City, Pa. Failure to produce roster of party hunting big game	25.00
Merryman, Robert Elwood, R. D. No. 3, Kittanning, Pa. Hunting small game in party of six	5.00
Striker, George Raymond, R. D. No. 1, Freeport, Pa. Hunting small game in party of six	5.00
Striker, Richard Allen, R. D. No. 1, Freeport, Pa. Hunting small game in party of six	5.00

FAYETTE—\$130.00

Moore, Bernard Joseph, Box 258, Dunbar, Pa. Possessing loaded shotgun in vehicle standing along highway	10.00
Oshinsky, Victor, Box 51, Chestnut Ridge, Pa. Killing antlerless deer in closed season	100.00
Robinson, William Edwin, Box 27, Mt. Braddock, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Russell, George Orlin, Box 167, Lemont Furnace, Pa. Possessing loaded shotgun in vehicle standing on highway	10.00

SOMERSET—\$90.00

Gomer, Robert Luther, R. D. No. 1, Hyndman, Pa. Failure to report shooting accident causing injury to another	25.00
Hammer, James Scott, R. D. No. 2, Hollsopple, Pa. Hunting without resident hunters license	20.00
Willison, Donald Loraine, R. D. No. 1, Hyndman, Pa. Failure to report shooting accident causing injury to another	25.00
Willison, Gerald William, R. D. No. 1, Hyndman, Pa. Hunting with firearm, not properly accompanied, when under 16 yrs. of age	20.00

WASHINGTON—\$65.00

Ambrose, Jr., Anthony, Box 10, Hendersonville, Pa. Raising fur-bearing animals (mink) for commercial purposes without a permit	25.00
Kopnisky, Joseph, West Brownsville, Pa. Dog running rabbits unaccompanied by their owner or handler	10.00
Moravitz, Edward Thomas, Box 123, Vestaburg, Pa. Hunting without resident license	20.00
Woody, Joseph Nathaniel, 1030 High St., California, Pa. Dog pursuing game unaccompanied by owners or trainer	10.00

WESTMORELAND—\$45.00

Kocka, Charles, R. D. No. 2, Apollo, Pa. Entering Auxiliary State Game Refuge in open season	25.00
McCurdy, Homer Smith, Box 107, New Derry, Pa. Possessing loaded shotgun in vehicle standing along highway	10.00
Moore, Harry Leslie, R. D. No. 1, Vandergrift, Pa. Setting one untagged trap	10.00

NON-RESIDENT—\$70.00

Baker, John Calvin, 643 Henderson Ave., Cumberland, Md. Hunting without Non-Resident License	50.00
Michaels, James Arthur, 2622 Woodhill Road, Cleveland, Ohio. Making false statement to secure a hunters license	20.00

Cases Settled During the Month of December, 1948

ALLEGHENY—\$245.00

Bilak, Sam (none), 78 Penna. Ave., Wall, Pa. Possessing a loaded gun in a vehicle	10.00
Cramer, Ray William, 5127 Center Ave., Pittsburgh 6, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Engle, Woodrow Douglas, 103-D Harper Dr., Turtle Creek, Pa. Hunting game without a resident hunters license	20.00
Evichak, John (none), Box 91, Renton, Pa. Failure to tag one trap	10.00
Gillner, Herbert Charles, R. D. No. 1, Glenshaw, Pa. Possessing two muskrats in closed season	20.00
Jacobs, Roy H., 237 Caufield St., Pittsburgh, Pa. Hunting in No. 6 Dog Training Reserve	25.00
Kitchen, Ralph Edward, 4306 Inland Ave., Kennywood, Pa. Transporting an untagged big game animal viz, a deer	25.00
Lazure, Jr., John (none), Large, Pa. Setting (2) steel traps closer than 5 ft. from hole	20.00
Listanti, Erasmo (none), 1715 3rd Ave., Arnold, Pa. Shooting within 150 yds. of occupied building without specific advance	25.00
Pierce, Vincent Luke, R. D. No. 3, Box 284, Turtle Creek, Pa. Failure to visit traps within 36 hours. Permission of owner or occupant	10.00
Razpotnik, William Steven, Box 257, Renton, Pa. Failure to tag one trap	10.00
Ringbloom, Vernon Frederick, 116 N. 2nd St., Duquesne, Pa. Shooting within 150 yds. of occupied buildings	25.00
Sartor, George Charles, 149 Cress Ave., Clairton, Pa. Hunting small game in a party of more than five (5) persons	5.00
Trisch, Robert (none), 1030 Talbot Ave., Braddock, Pa. Hunting without hunting license	20.00
Tushak, John Joseph, 149 Camp Ave., Braddock, Pa. Shooting at random in big game season	10.00

ARMSTRONG—\$75.00

Hooks, Jr., Boyd (none), R. D. No. 1, Rimer, Pa. Hunting without resident license	20.00
McGrainor, Thomas Delair, 212 N. Jefferson St., Kittanning, Pa. Possessing loaded gun in vehicle along highway	10.00
John, Orlo Lewis, 325 S. Jefferson Way, Kittanning, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Paroli, Norman (none), Cadogan, Pa. Possessing loaded gun in vehicle moving along highway	25.00
Yates, Lamar Larden, 1513 Orr Ave., Kittanning, Pa. Possessing loaded gun in vehicle along highway	10.00

BEAVER—\$20.00

Ostrander, Daniel Falonbe, R. D. No. 1, Freedom, Pa. Hunting with a borrowed license	20.00
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BEDFORD—\$20.00

Mowry, James Edwin, Box 314, Bedford, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Whisker, James Edwin, R. D. No. 1, Manns Choice, Pa. Shooting at target more than 200 yds. from headquarters in big game season	10.00

BLAIR—\$60.00

Shade, Eugene Lawrence, 319 Grant Ave., Altoona, Pa. Entering a Game Refuge during open season	25.00
Shade, Staly Lloyd, 319 Grant Ave., Altoona, Pa. Entering Auxiliary Game Refuge during open game season	25.00
Smith, William Paul, 343 S. 2nd St., Bellwood, Pa. Possessing loaded rifle in vehicle standing along public highway	10.00

CAMBRIA—\$145.00

Ashcraft, Christ (none), 501 Cooper Ave., Johnstown, Pa. Hunting small game in party of more than 5 persons	5.00
Ashcraft, Dewayne (none), 284 Glen St., Johnstown, Pa. Hunting small game in a party of more than 5 persons	5.00
Ballogh, George (none), 511 Cooper Ave., Johnstown, Pa. Possessing loaded rifle in vehicle standing along public highway	10.00
Balogh, John (none), 33 Veil Rd., Scalp Level, Pa. Shooting at target more than 200 yds. from hq. in big game season	10.00
Dunlop, William (none), R. D. No. 1, Barnesboro, Pa. Hunting small game in party of more than 5 persons	5.00
Dunlop, Woodrow (none), 1311 Philadelphia Ave., Barnesboro. Hunting small game in party of more than 5 persons	5.00
Glass, Leonard A., R. D. No. 1, Utahville, Pa. Making false statement to secure hunting license	20.00
Gulbash, Carl Harrington, Blandburg, Pa. Entering a Game Refuge during open season	25.00
Holmes, LeRoy Eunice, 250 Ebensburg Rd., Johnstown, Pa. Entering State Game Refuge in open game season	25.00
Vargo, James Andrew, 219 Iron St., Johnstown, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Vetro, Joseph Carl, 158 Adams St., Johnstown, Pa. Entering State Game Refuge in open game season	25.00

FAYETTE—\$495.00

Brain, John James, R. D. No. 4, Box 210, Uniontown, Pa. Failure to maintain roster while hunting big game	25.00
Broadwater, Donald (none), Isabelle, Pa. Failure to maintain roster while hunting big game	25.00
Clark, Robert Wayne, R. D. No. 1, Box 279-A, Smithfield, Pa. Hunting without resident hunters license	20.00
Dennis, Sylvester Clayton, R. D. No. 1, Markleysburg, Pa. Possessing loaded shotgun in vehicle standing on highway	10.00
George, Harold Fulton, Box 483, Uniontown, Pa. Hunting game without a resident hunting license	20.00

Humbertson, Elmer William, Box 51, Markleysburg, Pa. Possessing doe deer taken in closed season	100.00	Bungard, Fred K., R. D. No. 1, Markieton, Pa. Possessing loaded shotgun in vehicle standing along highway	10.00
Keteles, Louis James, Box 756, Republic, Pa. Shooting into live tree in big game season	10.00	Foley, James Aloysious, 109 Chestnut St., Meyersdale, Pa. Failure to tag traps (four)	40.00
Keteles, Paul George, Box 756, Republic, Pa. Shooting into live tree in big game season	10.00	Hollada, Darrell Richard, R. D., Fort Hill, Pa. Failure to report deer killed destroying property	100.00
Ostrich, Ralph Eugene, Hibbs, Pa. Shooting into live tree in big game season	10.00	Irons, Calvin Claycomb, R. D. No. 7, Box 154, Johnstown, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Schroyer, Garfield Henry, R. D. No. 1, Mill Run, Pa. Possessing loaded rifle in vehicle moving along highway	25.00	Korns, Ernest E., R. D. No. 1, Boswell, Pa. Hunting in Special Dog Training Area	25.00
Sheppard, Jr., Roman Malscih, Box 294, Grindstone, Pa. Shooting within a safety zone	25.00	Landis, Clarence Ezra, Berlin, Pa. Possessing loaded shotgun in vehicle standing along highway	10.00
Sheppard, Jr., Roman Malscih, Box 294, Grindstone, Pa. Killing a protected bird, a cardinal	10.00	Marker, George Earl, R. D. No. 1, Rockwood, Pa. Killing a doe deer in closed season	100.00
Shipley, Albert Harrison, Newell, Pa. Transporting untagged deer	25.00	Marker, George Earl, R. D. No. 1, Rockwood, Pa. Killing a second deer in one season	100.00
Show, Hiram Edison, Box 6, Isabella, Pa. Shooting at random during big game season	10.00	Shaffer, Guy Penrod, R. D. No. 1, Windber, Pa. Possessing loaded rifle in vehicle standing along public highway	10.00
Sillings, Oda Alon, R. F. D., Ohlipyale, Pa. Possessing deer more than sixty days after close of season	50.00		
Spaw, Glenn (none), R. D. No. 1, Ohlipyale, Pa. Possessing parts of deer taken in closed season	100.00	WASHINGTON—\$20.00	
Uhrin, Leonard John, Star Junction, Pa. Giving false information on bounty claim	20.00	Foutz, John Henry, Box 28, Scenery Hill, Pa. Having loaded gun in automobile along highway while hunting	10.00
		Plunkett, Oscar Oliver, Box 6, Strabane, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
INDIANA—\$715.00			
Boring, Paul Eugene, Rt. No. 2, New Florence, Pa. Killing deer (button buck) in closed season	100.00	WESTMORELAND—\$270.00	
Chappell, William J., 254 N. 3rd St., Indiana, Pa. Possessing loaded rifle on vehicle standing along public highway	10.00	Ferry, George Bernard, R. D. No. 2, Irwin, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Dodson, Charles Gettis, 137 E. Philadelphia St., Indiana. Enter a safety zone to pursue game during an open season. Discharged gun	25.00	Footo, Jack A. (none), 413 5th St., West Newton, Pa. Molesting a trap belonging to another without authority	25.00
Dunmire, Otis T., R. D. No. 2, Saltsburg, Pa. Training dog on game while carrying rifle	10.00	Hartzell, Frank Nicholas, 431 S. 6th St., Jeannette, Pa. Possessing loaded rifle in vehicle standing along public highway	10.00
Dunn, Jr., Robert Todd, 450 McClure Ave., Blairsville, Pa. Possessing loaded rifle in vehicle standing along public highway	10.00	Hauger, Lawrence (none), 318 E. Main St., Ligonier, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Ferrier, Leroy William, R. D. No. 2, Indiana, Pa. Possessing parts of spike buck deer taken in closed season	100.00	Leeper, Jr., Charles, R. D. No. 1, Mt. Pleasant, Pa. Shooting at unprotected target in big game season	10.00
Fulmer, John Leroy, R. D. No. 1, Shelocta, Pa. Failure to tag trap Laney, Don (none), Commodore, Pa. Hunting small game in party of more than 5 persons	5.00	Lewis, John Lyman, Box 24, Hillside, Pa. Possessing doe deer taken in closed season	100.00
Little, Robert Hugh, R. D. No. 1, Shelocta, Pa. Possessing 8 muskrats taken in closed season	80.00	Lickenfelt, Hilbert Dale, Box 240, Bolivar, Pa. Possessing loaded shotgun in vehicle standing along public highway	10.00
Ramsell, Sidney (none), Lucernemines, Pa. Possessing loaded rifle in vehicle standing along highway	10.00	Mosco, Emeric Herman, Rt. No. 3, Blairsville, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Scott, Wilbur John, R. D., Commodore, Pa. Killing doe deer in closed season	100.00	Riddle, Robert Joseph, Box 31, Penn, Pa. Molesting the trap of another without authority	25.00
Shankle, Calvin (none), R. D. No. 1, Cherry Tree, Pa. Hunting small game in party of more than 5 persons	5.00	Seybold, Robert George, R. D. No. 2, Ligonier, Pa. Possessing of furbearing animals (muskrats) unlawfully killed	50.00
Shankle, Earl (none), R. D. No. 1, Cherry Tree, Pa. Hunting small game in party of more than 5 persons	5.00	Wolfe, William Hunt, R. D. No. 2, Box 473, Jeannette, Pa. Possessing a loaded gun in a vehicle standing along a highway	10.00
States, James Lewis, 203 Grandview Ave., Indiana, Pa. Possessing parts of spike buck deer taken in closed season	100.00		
Stewart, Charles William, R. D. No. 4, Indiana, Pa. Killing deer with less than 2 points to one antler	100.00	NON-RESIDENT—\$570.00	
Talarovich, Joseph Michail, Box 46, Waterman, Pa. Possessing loaded rifle in vehicle, standing along highway	10.00	Bearer, Joseph Basil, 1003 E. 146 St., Cleveland, Ohio. Making false statement to secure license	20.00
Vargo, Michael Herky, 27 Carson St., Homer City, Pa. Possessing loaded rifle in vehicle standing along highway	10.00	Bender, Samuel W., R. D. No. 1, Grantsville, Maryland. Killing male deer in closed season	100.00
Wells, Melvin Lloyd, R. D. No. 1, Creekside, Pa. Failure to produce roster of party hunting big game	25.00	Bequeath, Russell Harrison, R. D. No. 1, McDonald, Ohio. Possessing spike buck deer taken in closed season	100.00
		Bratton, Betty Lee, Box 126, Beckley, W. Virginia. Hunting without Non-Resident License	50.00
		Bratton, Hayse Wallingford, Box 126, Beckley, W. Virginia. Hunting without Non-Resident License	50.00
		Diethrick, Walter James, 903 E. 146 St., Cleveland, Ohio. Making false statement to obtain license	20.00
		Drabish, Metro Emmett, 747 Carroll St., Akron, Ohio. Hunting without Non-Resident License	50.00
		Foster, Paul Pershing, Rt. No. 1, Nellie, Ohio. Possessing loaded rifle in vehicle standing along public highway	10.00
		Gosnell, James Francis, 642 Greenfield Ave., S. W. Canton, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
		Nyhart, Earl Wilfred, R. D. No. 2, Gambier, Ohio. Shooting at random in big game season	10.00
		Peterson, John Edward, 1314 Guage Court, Baltimore 25, Md. Hunting without Non-Resident License	50.00
		Snead, Bernard Clark, 201 Highland St., Beckley, W. Va. Hunting without Non-Resident License	50.00
		Snead, Marv Ruth, 201 Highland St., Beckley, W. Va. Hunting without Non-Resident License	50.00

Cases Settled During the Month of November, 1948

ALLEGHENY—\$1203.25		Fazekas, Alex, 300 2nd Street, Duquesne, Pa. Hunting small game between 5:00 P.M. and 7:00 A.M.	15.00
Allison, Edward, R. D. No. 1, Pitcairn, Pa. Shooting within 150 yards of occupied building without specified advance permission of owner or occupant	\$ 25.00	Fife, Norman Richard, 680 Crestview Drive, Bridgeville, Pa. Hunting without resident license	20.00
Arnold, Robert Theodore, 4782 Yew Street, Pittsburgh 24, Pa. Killing ringneck pheasant hen	25.00	Fowler, Ira Gale, Box 7, Warrendale, Pa. Shooting across a highway while hunting game	25.00
Born, Charles Edward, R. D. No. 3, Coraopolis, Pa. Hunting squirrels between 5:00 P.M. and 7:00 A.M.	15.00	Fowler, Ira Gale, Box 7, Warrendale, Pa. Shooting within 150 yards of occupied dwelling	25.00
Bralender, Herbert C., 711 East Parkway, McKeesport, Pa. Hunting without residence license	20.00	Fucho, Joseph William, 1613 Freeport Road, Tarentum, Pa. Possessing unwrapped 22 rifle in vehicle along highway between 5 P.M. and 7 A.M.	10.00
Brown, Charles Leroy, 509 Pine Hurst, McKeesport, Pa. Lending a hunting license	20.00	Gabelli, Louis, 142 Sumner Avenue, Pittsburgh 21, Pa. Hunting in Special Dog Training Area	25.00
Brown, James, 141B Linden Street, Clairton, Pa. Hunting small game in party of more than five persons	5.00	Goodman, Henry, 404 Devilliers Street, Pittsburgh, Pa. Failure to sign hunting license	1.00
Brown, John Philip, Smithdale, Pa. Hunting small game in party of more than five persons	5.00	Gregor, William Dale, 534 Washington Avenue, Dravosburg, Pa. Hunting wildlife on dog training preserve	25.00
Butcher, Marion Grey, R. D. No. 3, Spring Run Road, Coraopolis, Pa. Failure to display license tag while hunting	20.00	Harper, Perry, 427 Chestnut Street, McKeesport, Pa. Shooting protected bird	10.00
Caporizzo, Michael V., 1830 Walnut Street, Heidelberg, Pa. Hunting without resident license	20.00	Haverfield, William E., 19 Union Avenue, Crafton, Pa. Failure to display hunter's license	20.00
Dillen, Clyde Lewis, 362 Baldwin Road, Hays, Pa. Hunting small game between 5:00 P.M. and 7:00 A.M.	15.00	Hinkle, Frank Richard, 3418 Odair Street, McKeesport, Pa. Possession of a rabbit illegally taken	10.00
Dixon, Wilbur, Smithdale, Pa. Hunting small game in a party of more than five persons	5.00	Hinkle, Frank Richard, 3418 Odair Street, McKeesport, Pa. Killing game between 5:00 P.M. and 7:00 A.M.	15.00
Donovan, Francis Leo, 1228 Gailupe Drive, Brookline, Pittsburgh. Hunting without resident license	20.00	Holden, Ida, 1335 Herberton Avenue, Pittsburgh, Pa. Hunting without resident license	20.00
Faccini, Arthur L., 413 W. End Avenue, Coraopolis, Pa. Hunting without resident license	20.00	Holden, Ida, 1335 Herberton Avenue, Pittsburgh, Pa. Possessing a loaded shotgun in vehicle standing along highway	10.00
Faccini, Benjamin A., 413 W. End Avenue, Coraopolis, Pa. Lending license to another	20.00	Holden, William, 1335 Herberton Avenue, Pittsburgh, Pa. Hunting without resident license	20.00

Holden, William, 1335 Herberton Avenue, Pittsburgh, Pa. Possessing a loaded shotgun in vehicle standing along highway 10.00

Huch, Carl Wilbert, Jr., R. D. No. 7, Pittsburgh 29, Pa. Hunting without resident license 20.00

Humphrey, Norman R., Smithdale, Pa. Hunting small game in a party of more than five persons 5.00

Jones, Richard Lloyd, Box 115, Warrendale, Pa. Hunting rabbits between 5:00 P.M. and 7:00 A.M. 15.00

Lacey, Larry Paul, Smithdale, Pa. Hunting small game in party of more than five persons 5.00

Lawton, Frank, 143 Waddell Avenue, Clairton, Pa. Small game party of more than five days 5.00

Lindberg, Charles Allen, 2805 Cleveland Street, McKeesport, Pa. Possessing loaded rifle in vehicle standing along highway 10.00

Mattone, Andrew James, Box 243, Harwick, Pa. Possessing unwrapped 22 rifle in vehicle standing along highway between 5:00 P.M. and 7:00 A.M. 10.00

Maxey, Thomas, 110 Broadway, Clairton, Pa. Hunting small game in party of more than five persons 5.00

Metzger, Charles Eugene, Presto, Pa. Hunting without resident license 20.00

Metzger, Harold Elden, Presto, Pa. Lending hunting license to another 20.00

Metzger, Robert William, Presto, Pa. Failure to display license while hunting 20.00

Miller, Herbert, 718 Klemont Avenue, Bellevue, Pa. Hunting wild game, namely rabbits, within 150 yards of occupied building without specific advance permission of owner or occupant thereof 25.00

Mills, Sidney, 151-A Linden Avenue, Clairton, Pa. Hunting small game in party of more than five persons 5.00

Mumau, Vernon Jolly, 529 Center Avenue, E. Pittsburgh, Pa. Possessing loaded rifle in vehicle standing along highway 10.00

Muscatti, Alexander Joseph, R. D. No. 2, Coraopolis, Pa. Hunting rabbits between 5:00 P.M. and 7:00 A.M. 15.00

Pfab, Harry Elmer, 3352 Spring Garden Ave., Pittsburgh, Pa. Hunting wild game within 150 yards of occupied building without specific advance permission of owner or occupant thereof 25.00

Reich, John Patrick, 4008 Center Avenue, Munhall, Pa. Hunting wildlife on dog training preserve 25.00

Richards, James Lewis, R. D. No. 1, Monongahela, Pa. Hunting without resident hunting license 20.00

Rulofson, William Himes, 3482 York Street, Munhall, Pa. Killing game between 5:00 P.M. and 7:00 A.M. 15.00

Scaletti, Anthony, R. D. No. 2, Box A, Coraopolis, Pa. Failure to sign hunting license 1.00

Scaletti, Joseph James, R. D. No. 2, Box A, Coraopolis, Pa. Hunting without resident license 20.00

Schreiber, Edward J., 3364 Spring Garden Ave., Pittsburgh, Pa. Hunting wild game within 150 yards of occupied building without specific advance permission of owner or occupant thereof 25.00

Schwarz, John Joseph, 24 Winchell Street, Sharpsburg, Pa. Hunting game on Sunday 25.00

Shepner, Edward John, R. D. No. 2, Sewickley, Pa. Shooting within 150 yards of an occupied dwelling 25.00

Sinesky, Albert Robert, 138 Maple Street, Coverdale, Pa. Hunting and shooting at game within 150 yards of an occupied building 25.00

Smart, John William, Smithdale, Pa. Hunting small game in party of more than five persons 5.00

Suskalo, George, Box No. 13, Frank, Pa. Shooting within 150 yards of occupied buildings 25.00

Tobe, Horace Eugene, 280 State Street, Clairton, Pa. Hunting small game in a party of more than five persons 5.00

Tortorelli, Joseph A., Jr., 1246 Arkansas Avenue, Pittsburgh, Pa. Possessing loaded shotgun in vehicle standing along public highway 10.00

Trainman, Vensel, Box 132, Universal, Pa. Hunting game between 5 P.M. and 7 A.M. 15.00

Urick, John Joseph, R. D. No. 2, Pitcairn, Pa. Hunting without resident license 20.00

Valentino, Anthony Alfred, 239 Kaercher Street, Pittsburgh, Pa. Shooting upon lands of an institution 25.00

Valentino, Bernardo, 4501 Chatsworth Avenue, Pittsburgh, Pa. Shooting upon lands of an institution 25.00

Valentino, Emidio, 239 Kaercher Street, Pittsburgh, Pa. Shooting upon lands of an institution 25.00

Valentino, Emidio, Jr., 239 Kaercher Street, Pittsburgh, Pa. Shooting upon lands of an institution 25.00

VanKirk, Glenn Robert, 3423 Spring Garden Ave., Pittsburgh, Pa. Hunting without resident license 20.00

Wall, Ervin, Smithdale, Pa. Hunting small game in a party of more than five 5.00

Wall, Ewin, Smithdale, Pa. Hunting small game in party of more than five persons 5.00

Westen, Emil John, 9 Bethel Road, R. D. No. 2, Bridgeville, Pa. Lending hunting license to another 20.00

Wolfe, Herbert Jerome, R. D. No. 3, Lilac Avenue, Bellevue, Pa. Possessing loaded rifle in vehicle standing along public highway 10.00

Wylie, Finley, 504 Oakwood Avenue, Pittsburgh, Pa. Shooting at game within 150 yards of occupied building without specific advance permission of the owner or occupant thereof 25.00

Zoeller, Fred Elmer, 605 Charette Place, Sewickley, Pa. Failure to display license tax while hunting 20.00

Zoth, William, Box 867, Spring Garden Rd., Pittsburgh, Pa. Hunting without resident license 20.00

ARMSTRONG—\$355.00

Barto, John Earheart, R. D. No. 3, Apollo, Pa. Hunting without a resident hunting license 20.00

Bohme, William Lloyd, R. D. No. 1, Rural Valley, Pa. Hunting small game in a party of more than five persons 5.00

Bryan, William Conrad, 820 5th Avenue, Ford City, Pa. Hunting game prior to opening hour on first day 15.00

Crissman, George Ellsworth, R. D. No. 1, Adrian, Pa. Hunting squirrel with shotgun containing more than three shells 10.00

Fair, Frank Howard, R. D. No. 1, Adrian, Pa. Hunting without resident license 20.00

Farone, Joseph, R. D. No. 1, East Brady, Pa. Dumping refuse on State Game Lands No. 105 25.00

Herr, Jack Edward, c/o Ben Desantis, R. D. No. 2, New Bethlehem, Pa. Possessing seven rabbits over two day bag limit 70.00

Mastarone, Idale, Box 193, Leechburg, Pa. Attempting to kill hen pheasant 25.00

Mikesell, Homer Joseph, R. D. No. 4, Apollo, Pa. Possessing parts of ringneck pheasant in close season 25.00

Murtland, Woody Rollo, 1360 N. Grant Avenue, Kittanning, Pa. Hunting game between 5 P.M. and 7 A.M. 15.00

Nolder, Ambrose Sylvester, R. D. No. 1, Kittanning, Pa. Hunting without resident license 20.00

Schreckengost, Ben Russell, R. D. No. 1, New Bethlehem, Pa. Hunting prior to opening hour first day of season 15.00

Schreckengost, Ben Russell, R. D. No. 1, New Bethlehem, Pa. Shooting at game on highway 25.00

Schreckengost, Ray Glenn, R. D. No. 4, New Bethlehem, Pa. Hunting game prior to opening hour first day 15.00

Smith, Lloyd Edwin, R. D. No. 1, Cowansville, Pa. Hunting without resident license 20.00

Unger, James Richard, R. D. No. 1, Rimer, Pa. Hunting without resident license 20.00

Unger, Leo Raymond, R. D. No. 1, Rimer, Pa. Hunting rabbits with shotgun containing more than three shells 10.00

BEAVER—\$170.00

Cumberledge, Charles Frank, R. D. No. 1, Industry, Pa. Hunting without resident license 20.00

Leavell, Walter Nelson, 346 Ohio Avenue, Midland, Pa. Possessing one rabbit over daily limit 10.00

Miller, Frederick Eugene, Betchel Street, Ext., Monaca, Pa. Failure to display license tag while hunting 20.00

Pogue, James Aubrey, 323 Penn Avenue, Midland, Pa. Hunting small game in party of more than five persons 30.00

Safreed, Clarence Audrey, R. D. No. 3, Beaver Falls, Pa. Hunting game between 5 P.M. and 7 A.M. 15.00

Safreed, Jack Donald, R. D. No. 3, Beaver Falls, Pa. Hunting game between 5 P.M. and 7 A.M. 15.00

Vojnovich, Paul, R. D. No. 1, Smith Ferry, Pa. Hunting on adjacent lands without written consent 20.00

Yannachione, Robert G., 196 Madison Street, Rochester, Pa. Hunting without resident license 20.00

Zlatovich, Joseph, Jr., R. D. No. 1, Smith Ferry, Pa. Hunting without resident license 20.00

BEDFORD—\$105.00

Hasselrode, Fred Lee, R. D. No. 1, Hyndman, Pa. Hunting game prior to opening hour first day 15.00

Kennell, Earl Edward, R. D. No. 1, Hyndman, Pa. Hunting game prior to opening hour first day 15.00

Ritchey, Jack Edward, Hyndman, Pa. Hunting game prior to opening hour first day 15.00

Sish, Raymond Grant, Hyndman, Pa. Hunting game prior to opening hour first day 15.00

Westover, Warren Henry, Alum Bank, Pa. Using artificial light to take two rabbits 20.00

Westover, Warren Henry, Alum Bank, Pa. Hunting rabbits on Sunday 25.00

CAMBRIA—\$595.00

Abrams, Martin Leo, Spangler, Pa. Hunting between 5 P.M. and 7 A.M. 15.00

Abrams, William, Jr., Spangler, Pa. Using a hunting license and tag of another 20.00

Baldini, Amerigo, Box 553, Colver, Pa. Killing game between 5 P.M. and 7 A.M. 15.00

Bernecky, John, Emeigh, Pa. Hunting small game in party of more than five persons 5.00

Bernecky, Pete, Box 272, Emeigh, Pa. Hunting small game in party of more than five persons 5.00

Bernecky, Simon, Ebensburg, Pa. Hunting small game in party of more than five persons 5.00

Burkey, Arthur, Ebensburg, Pa. Hunting in safety zone 25.00

Butterbaugh, Ellie, R. D. No. 1, Barnesboro, Pa. Hunting small game in party of more than five persons 5.00

Claycomb, Daniel, House 1272, Mine 42, Wingber, Pa. Possessing skin of furbearing animal in close season 10.00

Eger, Clarence Edward, 609 Portage Road, Cresson, Pa. Hunting on Sanitorium Grounds 25.00

Eger, Edward James, Portage Road, Cresson, Pa. Hunting on Sanitorium Grounds 25.00

Gill, Gordon Ignatius, R. F. D., Ashville, Pa. Lending license to another 20.00

Gill, Louis Gerald, R. F. D., Ashville, Pa. Hunting without resident license 20.00

Goldblatt, Joseph Bernard, Beaverdale, Pa. Issuing hunting license without satisfactory identification 20.00

Gray, James Vincent, Elmora, Pa. Shooting within 150 yards of an occupied building 25.00

Holtz, Clement Bernard, R. F. D. No. 1, Hastings, Pa. Hunting small game in party of more than five persons 5.00

Keith, Ronald Clair, R. F. D., Fallen Timber, Pa. Attempting to take turkey in close season 25.00

Kielbowick, Albert T., R. F. D. No. 1, Patton, Pa. Hunting small game in party of more than five persons 5.00

Kielbowick, Louis John, R. F. D. No. 1, Patton, Pa. Hunting small game in party of more than five persons 5.00

Kielbowick, Vincent, R. F. D., Patton, Pa. Hunting small game in party of more than five persons 5.00

Kline, Richard James, 613 McGee Avenue, Patton, Pa. Hunting small game in party of more than five persons 5.00

Kurtz, John Clair, Jr., R. F. D., Hastings, Pa. Trapping with untagged trap 10.00

Kurtz, John Clair, Jr., R. F. D., Hastings, Pa. Disturbing traps of another 25.00

Lucas, Carl Edward, Box 272, Emeigh, Pa. Hunting small game in party of more than five persons 5.00

Morgart, Marshall Earl, 787 Cottage Place, Johnstown, Pa. Hunting without a resident hunters license 20.00

Myers, Harold Devon, 422 Oak Street, Conemaugh, Pa. Lending hunters license to another 20.00

Myers, Wendel, Jr., Box 151, R. D. No. 1, South Fork, Pa. Hunting without a resident hunters license 20.00

Nagle, Clair Joseph, R. F. D., Patton, Pa. Hunting small game in party of more than five persons 5.00

Nesbit, Earl, 2107 Chestnut Avenue, Barnesboro, Pa. Hunting small game in party of more than five persons 5.00

Plazek, Robert Charles, Cresson, Pa. Discharging firearms within one hundred fifty yards of occupied building 25.00

Polisky, John, Box 167, Elmora, Pa. Killing ringneck pheasant hen 25.00

Robson, Clarence, 55 R. Dupont Place, Johnstown, Pa. Possessing loaded firearm in vehicle standing along highway	10.00
Rudolph, William A., 321 Herman Avenue, Cambria, Pa. Discharging firearms within 150 yards of occupied buildings	25.00
Rupert, Richard, Milo Park, Ebensburg, Pa. Hunting small game in party of more than five persons	5.00
Schmidt, Albert Ray, Beaverdale, Pa. Making false statement to secure resident hunters license	20.00
Shope, Fred, Barnesboro, Pa. Hunting small game in party of more than five persons	5.00
Simmons, Jack David, Box 123, Puritan, Pa. Entering State Game Refuge in open season	25.00
Toth, Steve, R. D. No. 1, Box 175, Barnesboro, Pa. Hunting small game in party of more than five persons	5.00
Vermeulen, Chester E., 618 Portage Road, Cresson, Pa. Under 16 years of age, hunting unaccompanied by adult	20.00
Wantiez, Frank D., Box 59½, St. Michael, Pa. Hunting without resident hunters license	20.00
Work, Ben, 908 Maple Avenue, Barnesboro, Pa. Hunting small game in party of more than five persons	5.00
Work, Harold P., 2009 Chestnut Avenue, Barnesboro, Pa. Hunting small game in party of more than five persons	5.00

CLINTON—\$25.00

Smith, Charles Leslie, 421 South Fairview, Pa. (Lock Haven). Shooting within 150 yards of occupied buildings	25.00
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FAYETTE—\$1,165.00

Bacchus, Ivan, R. D. No. 1, Grindstone, Pa. Hunting without a license in Jefferson Township, Fayette County	20.00
Ball, Wilbur Ernest, 229 Prospect Street, Uniontown, Pa. Hunting without resident hunting license	20.00
Chamberlain, Glen, R. D. No. 2, Box 265-B, Uniontown, Pa. Possessing parts of deer taken in closed season	100.00
Chamberlain, Opal, Star Route, Uniontown, Pa. Possessing parts of deer taken in closed season	100.00
Chippis, William Andrew, R. D. No. 1, Smithfield, Pa. Hunting squirrels between 5:00 P. M. and 7:00 A. M.	10.00
Chmiel, Ignatius, Box 1416, Uniontown, Pa. Discharging firearm in safety zone	25.00
Cramer, Roy Edward, 15 Willow Street, Uniontown, Pa. Shooting at and attempting to kill a ringneck hen	25.00
Henner, Rufus, Grindstone, Pa. Shooting at rabbit in safety zone	25.00
Hoff, Wilbert Erman, Box 418, Cool Springs, Pa. Having loaded gun in automobile while hunting	10.00
Hovanec, Stephen John, Box 273, Smock, Pa. Hunting without license	20.00
Jones, Samuel, Grindstone, Pa. Shooting at rabbit in safety zone	25.00
Lagina, Joseph Francis, R. D. No. 1, Brownsville, Pa. Possession of one muskrat pelt taken in closed season	10.00
Leachman, Paul, Box 118, Ronco, Pa. Lending hunting license to another	20.00
Leasure, Bert, Box 224, Brownsville, Pa. Failure to display license properly while hunting	20.00
McNeal, James William, 265 Linn Avenue, Washington, Pa. Shooting at random	10.00
Mays, Leroy Ralph, Indian Head, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Mays, Leroy Ralph, Indian Head, Pa. Possessing game unlawfully taken	10.00
Monavich, Steve Paul, Box 414, Ann Street, Brownsville, Pa. Hunting with a borrowed license	20.00
Owens, Edward Thomas, Jr., E. Church Street, Masontown, Pa. Hunting without resident hunting license	20.00
Package, Thomas, Fayette City, Pa. Discharging firearm in safety zone while hunting rabbits	25.00
Patton, Harry Burton, Walnut Street, Masontown, Pa. Lending hunting license to another person	20.00
Patton, Richard Andy, River Avenue, Masontown, Pa. Lending hunting license to another person	20.00
Phillips, John Allen, 103 E. Peach Street, Connellsville, Pa. Possessing one rabbit over the daily bag limit	10.00
Pickell, Howard C., Jr., 2611 Fayette Street, McKeesport, Pa. Hunting without resident license	20.00
Piper, Silas Richard, Box 254, Newell, Pa. Failure to display license properly while hunting	20.00
Poole, Albert Leslie, Lambert, Pa. Hunting without resident hunters license	20.00
Poundstone, Charles W., R. D. No. 3, Uniontown, Pa. Hunting in a safety zone	25.00
Price, Arthur, Box 437, Scottdale, Pa. Discharging a weapon within 150 yards of occupied buildings without permission from the owner	25.00
Provance, William E., R. D. No. 1, Smithfield, Pa. Possessing green pelts of four muskrats in closed season	40.00
Provance, William E., R. D. No. 1, Smithfield, Pa. Setting traps for muskrats prior to opening hour	60.00
Raymond, Daniel, Chalk Hill, Pa. Possessing parts of deer taken in closed season	100.00
Reed, Isaac Stoner, R. D. No. 1, Uniontown, Pa. Hunting without resident hunter's license	20.00
Singleton, Julius, Jr., Whitsett, Pa. Hunting in a safety zone	25.00
Solarchick, Alex, Jr., New Salem, Pa. Failure to display license properly while hunting	20.00
Stefek, Steve, Sr., Ann Street, Box 414, Brownsville, Pa. Lending hunting license to another	20.00
Valgora, George S., Brownsville, Pa. Killing hen pheasant	25.00
Weirich, Frank Roy, Jr., 117 Jefferson Avenue, Washington, Pa. Loaded rifle in vehicle	10.00
Westbrook, Henry Andrew, Box 172, Cardale, Pa. Loaded rifle in vehicle on highway	10.00
Winkelvoss, Robert S., Box 358, Smithfield, Pa. Lending hunting license to another person	20.00
Woods, Willie Lee, Box 233, Cardale, Pa. Loaded shotgun in vehicle	10.00
Workman, Harry, Star Route, Uniontown, Pa. Possessing doe deer taken in closed season	100.00
Younkin, Roger Glenn, Box 287, Reidmore Road, S. Connellsville. Shooting at small game prior to 9 A. M. on the opening day of the season	15.00

GREENE—\$115.00

Everly, Richard Arthur, Davistown, Pa. Hunting without a resident license	20.00
Gallatin, Leland, Bobtown, Pa. Hunting without a resident license	20.00

Kerr, Rodney Irwin, Carmichaels, Pa. Killing ringneck hen	25.00
Lemley, Oliver Franklin, Mt. Morris, Pa. Having loaded gun in automobile	10.00
Ogle, William, Jr., Brave, Pa. Having loaded gun in automobile	10.00
Sowers, Charles M., Waynesburg, Pa. Trapping without license	20.00
Sowers, Charles M., Waynesburg, Pa. One trap not tagged	10.00

INDIANA—\$795.00

Alabran, Frank Harry, R. D. No. 1, Smicksburg, Pa. Hunting small game in party of more than five persons	5.00
Alabran, William Henry, R. D. No. 1, Smicksburg, Pa. Hunting small game in party of more than five persons	5.00
Alabran, William Merle, R. D. No. 1, Smicksburg, Pa. Hunting small game in party of more than five persons	5.00
Belice, August, Star Route, Edri, Pa. Possessing doe deer taken in closed season	100.00
Bernecky, Anthony, R. D. No. 2, Cherry Tree, Pa. Hunting small game in party of more than five persons	5.00
Berringer, Alex Grant, Sunset Street, Rossiter, Pa. Hunting without resident license	20.00
Bowser, Donald Eugene, Box 3, Penn Run, Pa. Hunting within 150 yards of an occupied building	25.00
Brady, Arley Augustine, R. D. No. 2, Marion Center, Pa. Aiding in the taking of a live raccoon in closed season	25.00
Brady, Lisle Hugh, R. D. No. 2, Marion Center, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Brady, Richard Paul, R. D. No. 2, Marion Center, Pa. Possessing raccoon in closed season	25.00
Cramer, Robert, R. D. No. 2, Marion Center, Pa. Aiding in the taking of a live raccoon in closed season	25.00
Csanyi, Frank Richard, Clune, Pa. Hunting small game with shot gun containing over three shells	10.00
Dixon, Clarence Leroy, Box 116, Creekside, Pa. Shooting within 150 yards of occupied building	25.00
Dotts, Vaughn Herschel, R. D. No. 3, Shelocta, Pa. Hunting small game between 5 P. M. and 7 A. M.	15.00
Edwards, Williams Lawrence, R. D. No. 1, Home, Pa. Possessing a male deer in closed season	100.00
Ernst, Walter Gilson, Dixonville, Pa. Hunting small game in party of more than five persons	5.00
Foltz, Thomas Edward, Ernest, Pa. Shooting at game on highway	25.00
Hauser, Ernest Ludwig, R. D. No. 1, Homer City, Pa. Hunting game (woodchucks) on Sunday	25.00
Henry, Jacob Earl, Seward, Pa. Hunting before the opening hour on the first day of open small game season	15.00
Hess, Harry Irwin, 228 S. 7th Street, Indiana, Pa. Shooting across highway while hunting game	25.00
Jennings, Richard C., Graceton, Pa. Attempting to kill ring-neck pheasant in closed season	25.00
Kalafsky, John J., Clune, Pa. Shooting across highway while hunting game	25.00
Kinter, Ivan, 1261 Oakland Avenue, Indiana, Pa. Hunting small game with shotgun containing more than three shells	10.00
Lowry, Porter Alvin, Sharpesville, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
McKeever, Carvell Franklin, R. D. No. 1, Saltsburg, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
McKeever, Wallace Scott, R. D. No. 1, Saltsburg, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
McMillen, Floyd, R. D. No. 1, Home, Pa. Hunting without resident license on lands other than adjoining lands	20.00
Millen, Robert Arthur, Sr., R. D. No. 1, Home, Pa. Killing game between 5 P. M. and 7 A. M.	15.00
Moretti, Robert Francis, Creekside, Pa. Failure to display license tag while hunting	20.00
Nippes, Joseph Thomas, Box 55, Blacklick, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Owens, Donald Eugene, 73 N. 4th Street, Indiana, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Shrum, Orvil Barto Jr., Clarksburg, Pa. Hunting small game in party of more than five persons	5.00
Smith, Homer Bob, R. D. No. 1, Blairsville, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Stancombe, Walter James, R. D. No. 4, Indiana, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Stephens, Donald H., Box 55, Penn Run, Pa. Using vehicle to hunt game	50.00
Thomas, William Merle, Marion Center, Pa. Giving wrong date to collect bounty	30.00
Windows, Gordon Eugene, R. D. No. 2, Homer City, Pa. Hunting small game with shotgun containing over three shells	10.00

JEFFERSON—\$45.00

Bennett, James Robert, 203 McHugh Avenue, Punxsutawney, Pa. Possessing a grouse in closed season	25.00
Sharpe, David Richard, Emericksville, Pa. Hunting wild game without a resident hunters license	20.00

SOMERSET—\$820.00

Alexander, Edward Leroy, R. D. No. 1, Stoystown, Pa. Hunting small game in party of more than five persons	5.00
Alexander, William Henry, R. D. No. 1, Stoystown, Pa. Hunting small game in party of more than five persons	5.00
Blough, Paul George, R. D. No. 2, Hollsopple, Pa. Hunting squirrels between 5 P.M. and 7 A.M.	15.00
DiMarco, Jiosue, 1912 Cambria Avenue, Windber, Pa. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Drenner, Claude William, Hollsopple, Pa. Hunting within 150 yards of occupied buildings	25.00
Edwards, Leo Perry, 1814½ Graham Avenue, Windber, Pa. Hunting prior to 9 A. M. on November 1, 1948	15.00
Fritz, Albert Jerome, R. D. No. 5, Somerset, Pa. Hunting rabbits with shotgun containing more than three shells	10.00
Gardner, George, R. D. No. 3, Somerset, Pa. Possessing deer taken in closed season	100.00
Harbaugh, Clair S., Cairnbrook, Pa. Using artificial light to take two rabbits	20.00
Harbaugh, Clair S., Cairnbrook, Pa. Hunting rabbits on Sunday	25.00
Horne, Donald Eugene, R. D. No. 1, Hollsopple, Pa. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Horne, Earl Samuel, R. D. No. 1, Hollsopple, Pa. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Keller, Homer Calvin, R. D. No. 3, Stoystown, Pa. Possessing loaded shotgun in vehicle in motion on public highway	25.00

Krause, Sam, R. D. No. 1, Glenco, Pa. Taking muskrat in closed season	40.00
Krupa, Ted Joseph, Jerome, Pa. Hunting small game in party of more than five persons	5.00
Lake, Albert L., Box 412, Hooversville, Pa. Resisting arrest	100.00
Marian, Anthony, Jerome, Pa. Hunting small game in party of more than five persons	5.00
Newcomer, John Henry, R. D. No. 3, Box 293, Johnstown, Pa. Hunting small game in party of more than five persons	5.00
Petro, Stephen Michael, 1904 Cambria Avenue, Windber, Pa. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Phillips, Michael, Jerome, Pa. Hunting small game in party of more than five persons	5.00
Reese, Mahlon, R. D. No. 3, Somerset, Pa. Possessing deer taken in closed season	100.00
Robertson, Thomas, Jr., R. D. No. 3, Meyersdale, Pa. Failure to tag two traps	20.00
Robertson, Thomas, Sr., R. D. No. 3, Meyersdale, Pa. Possessing skin of fur-bearing animal unlawfully killed	30.00
Shaffer, Melvin Dean, R. D. No. 2, Stoystown, Pa. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Shuster, John, 906 17th Street, Windber, Pa. Hunting within 150 yards of occupied buildings	25.00
Smith, Telford Charles, Jr., R. D. No. 2, Hollsopple, Pa. Hunting without resident license	20.00
Yoder, Clifford Merle, R. D. No. 4, Johnstown, Pa. Hunting within 150 yards of occupied buildings	25.00
Zanoni, Geno, R. D. No. 2, Hollsopple, Pa. Hunting within 150 yards of occupied buildings	25.00
Zerfoss, Hilton, R. D. No. 2, Friedens, Pa. Possessing loaded rifle in vehicle, in motion on highway	25.00

WASHINGTON—\$541.00

Bernacki, Frank Peter, R. D. No. 3, Canonsburg, Pa. Hunting game between the hours of 5 P. M. and 7 A. M.	15.00
Bezy, Theodore Adolph, 222 Fallowfield Street, Charleroi, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Caserta, James D., Jr., R. D. No. 1, Finleyville, Pa. Failure to show hunter's license on demand	20.00
Davidson, David Rudolph, 715 S. Central Avenue, Canonsburg, Pa. Making false statement to secure hunting license	20.00
Davidson, David Rudolph, 715 S. Central Avenue, Canonsburg, Pa. Giving false information to obtain hunting license	20.00
Davis, John, Atlasburg, Pa. Shooting at game while on highway	25.00
Dille, George Leroy, R. D. No. 3, Canonsburg, Pa. Hunting without resident license	20.00
Edmunds, Arthur Stephen, 249 Race Street, Washington, Pa. Failure to sign hunting license	1.00
Finley, Cloyce Lovell, Box 403, Westland, Pa. Failure to show hunting license on demand of land owner	20.00
France, August Anton, 451 Hodgeson Street, Monongahela, Pa. Hunting upon a Special Dog Training Area	25.00
Galik, Mike, 466 Highland Avenue, Monongahela, Pa. Hunting upon a Special Dog Training Area	25.00
Harsh, Joseph John, Pleasant Alley, Monongahela, Pa. Hunting upon a Special Dog Training Area	25.00
Higgins, Mike, General Delivery, Strabane, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Johnston, Robert Munhall, Canonsburg, Pa. Having loaded gun in automobile while hunting	10.00
Karnack, Frank Vincent, 215 Union Street, Monongahela, Pa. Hunting upon a Special Dog Training Area	25.00
Kotarsky, Thomas Patrick, Marianna, Pa. Permitted Joseph Michael Kotarsky to hunt without resident license	20.00
Koval, Charles William, 338 Wylie Avenue, Strabane, Pa. Hunting with firearm not properly accompanied, when under 16 years of age	20.00
Lemonakis, Frank Steve, 503 Blaine Street, Canonsburg, Pa. Hunting for and disturbing small game within 150 yards of an occupied bldg.	25.00
Lemonakis, Manuel, 503 Blaine Street, Canonsburg, Pa. Shooting within 150 yards of occupied buildings	25.00
Levi, Daniel Paul, R. D. No. 1, Finleyville, Pa. Failure to show hunter's license on demand	20.00
Norwood, Lee Frank, 313 Richland Avenue, Canonsburg, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Pounds, Clayton E., R. D. No. 1, West Brownsville, Pa. Killing one rabbit and one squirrel in closed season	20.00
Pounds, Clayton E., R. D. No. 1, West Brownsville, Pa. Hunting in closed season and killing one rabbit and one squirrel, without license	40.00
Sim, Alfred David, Crothers Station, Pa. Hunting without resident license	20.00
Sosanko, Andrew, 710 6th Street, Charleroi, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Vrtacnik, Jacob, R. D. No. 2, McDonald, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Willis, Kelsey, Bulger, Pa. Shooting at game in safety zone	25.00

WESTMORELAND—\$812.00

Arway, John, Box 118, Wyano, Pa. Hunting game between the hours 5 P. M. and 7 A. M.	15.00
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Baker, Jerome Paul, R. D. No. 2, Irwin, Pa. Hunting rabbits between the hours of 5 P. M. and 7 A. M.	15.00
Bearer, Louis John, 204 St. Clair Street, Ligonier, Pa. Hunting rabbits between the hours of 5 P. M. and 7 A. M.	15.00
Blank, Daniel Lawrence, R. D. No. 1, Jeannette, Pa. Possessing two muskrats in closed season	20.00
Brisbine, Charles Delbert, Box 457, Herminie, Pa. Hunting without a resident license	20.00
Brown, Elmer Wilfred, Route 1, Ligonier, Pa. Hunting rabbits with shotgun containing more than three shells	10.00
Cline, Donald Raymond, R. D. No. 1, Export, Pa. Shooting at game on highway	25.00
Evans, Don Shumaker, R. D. No. 2, Greensburg, Pa. Hunting game between the hours of 5 P. M. and 7 A. M.	15.00
Gord, Frank's Robert, 918 Ellsworth Avenue, Jeannette, Pa. Hunting without resident license	20.00
Grumm, Robert, Jones Mills, Pa., Killing doe deer in closed season	100.00
Hager, Wendell Simmerson, R. D. No. 1, Irwin, Pa. Hunting small game between the hours of 5 P. M. and 7 A. M.	15.00
Hauger, Wilford C., 210 Ligonier Street, Latrobe, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Hazlett, William Ronald, Box 37, Harrison City, Pa. Possessing two muskrats in closed season	20.00
Katsilas, Gust A., R. D. No. 4, Irwin, Pa. Critically wounding a hen pheasant in closed season	25.00
Klanica, John, R. D. No. 2, Box 172, Leechburg, Pa. Hunting game without a resident hunting license	20.00
Klein, James Julian, Box 164-A, New Kensington, Pa. Shooting within 150 yards of occupied building without specific advance permission of occupant	25.00
Knapp, Wade Leslie, 1408 Orchard Avenue, New Kensington, Pa. Transporting uncased shotgun in vehicle on highway between 5 P. M. and 7 A. M.	25.00
Lafko, Edward Joseph, Box 53, R. D. No. 1, Smithton, Pa. Attempting to take muskrat in closed season	10.00
Larese, John Bert, Box 541, Export, Pa. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
McCann, Paul Eugene, Arona, Pa. Possessing loaded gun in vehicle along highway	10.00
Marshall, George William, R. D. No. 3, Greensburg, Pa. Possessing skins of fur-bearing animals unlawfully taken	30.00
Mogerman, Abraham, 800 Clay Avenue, Jeannette, Pa. Lending hunting tag to another	20.00
Mutnansky, Joseph John, 216 Smithfield Street, Mt. Pleasant, Pa. Hunting game between the hours of 5 P. M. and 7 A. M.	15.00
Reindfleisch, Carl Gust, Box 45, New Florence, Pa. Hunting rabbits with shotgun containing more than three shells	10.00
Rodebaugh, Gaylord, R. D. No. 4, Irwin, Pa. Hunting rabbits within 150 yards of occupied buildings	25.00
Roth, Donald Anthony, 20 DuBois Street, Scottdale, Pa. Hunting prior to the opening hour of the season	15.00
Sebring, Willard Linden, Seward, Pa. Hunting game between 5 P. M. and 7 A. M.	15.00
Shawley, Lloyd, Box 63, Stahlstown, Pa. Killing deer in closed season	100.00
Sokol, Mike, Van Meter, Pa. Molesting the traps of another	25.00
Sokol, Mike, Van Meter, Pa. Possessing four muskrats in closed season	40.00
Urbanowski, Lee William, Calumet, Pa., Discharging a weapon within 150 yards of an occupied dwelling without the owner's consent	25.00
Waltz, Richard, 223 4th Street, Irwin, Pa. Hunting rabbits between the hours of 5 P. M. and 7 A. M.	15.00
Whigam, Lester Eugene, Arona, Pa. Possessing loaded gun in vehicle along highway	10.00
Whigam, William Cyrus, Arona, Pa. Possessing loaded gun in vehicle along highway	10.00
Yedlicka, George, Box 70, Irwin, Pa. Hunting wild game within 150 yards of occupied dwellings	25.00

NON-RESIDENTS—\$270.00

Berry, Gerald Elmer, R. D. No. 3, Box No. 358, Kent, Ohio. Shooting within 150 yards of occupied building	25.00
Burkett, William E., Ellerslie, Maryland. Hunting game prior to opening hour first day	15.00
Burroughs, Edward, 1595 Huguelet Street, Akron, Ohio. Hunting without non-resident license	50.00
Davidson, Chester R., 1304 Onondago Avenue, Akron, Ohio. Hunting without non-resident license	50.00
Duvall, Claude Owen, 3035 M Street, S. E., Washington, D. C. Hunting without non-resident license	50.00
Hawkins, James Willard, 26½ S. Main Street, Rittman, Ohio. Transporting two rabbits and three squirrels unaccompanied by owner	50.00
Jordan, John Vincent, 124 Nebraska Street, Akron, Ohio. Possessing loaded rifle in vehicle standing along public highway	10.00
Shelley, John William, 5 Kenmore Avenue, Barberton, Ohio. Transporting two rabbits unaccompanied by owner	20.00

Corrections to Previously Published Game Law Violation Lists

Through unavoidable errors, the following named persons were listed in previous issues as having committed Game Law violations. Their cases have been reviewed by either the courts or the Pennsylvania Game Commission and they have been found not guilty. The Pennsylvania Game Commission sincerely regrets publication of their names and apologizes for the mistaken reflection on their observance of the law.

Name	Address	Issue Published
Allen, Arthur E.,	1015 S. 16th St., Harrisburg	February
Batzer, Charles R.,	318 Pleasure Rd., Lancaster	February
Brock, Carlisle O.,	2607 Bird Drive, Wesleyville	February
DeCubber, Charles L.,	4 W. 3d St., Williamsport	March
Hawley, Edward A.,	Binghamton, N. Y.	April

Name	Address	Issue Published
Hoffman, Willard R.,	223 E. Walnut St., Shillington	February
Hoover, James E.,	1529 Swatara St., Harrisburg	March
Minor, Zerl B.,	2313 Taggart St., Wesleyville	February
Noble, Thomas L.,	RD 1, Great Bend	February
Tereman, John G.,	Bound Brook, N. J.	February

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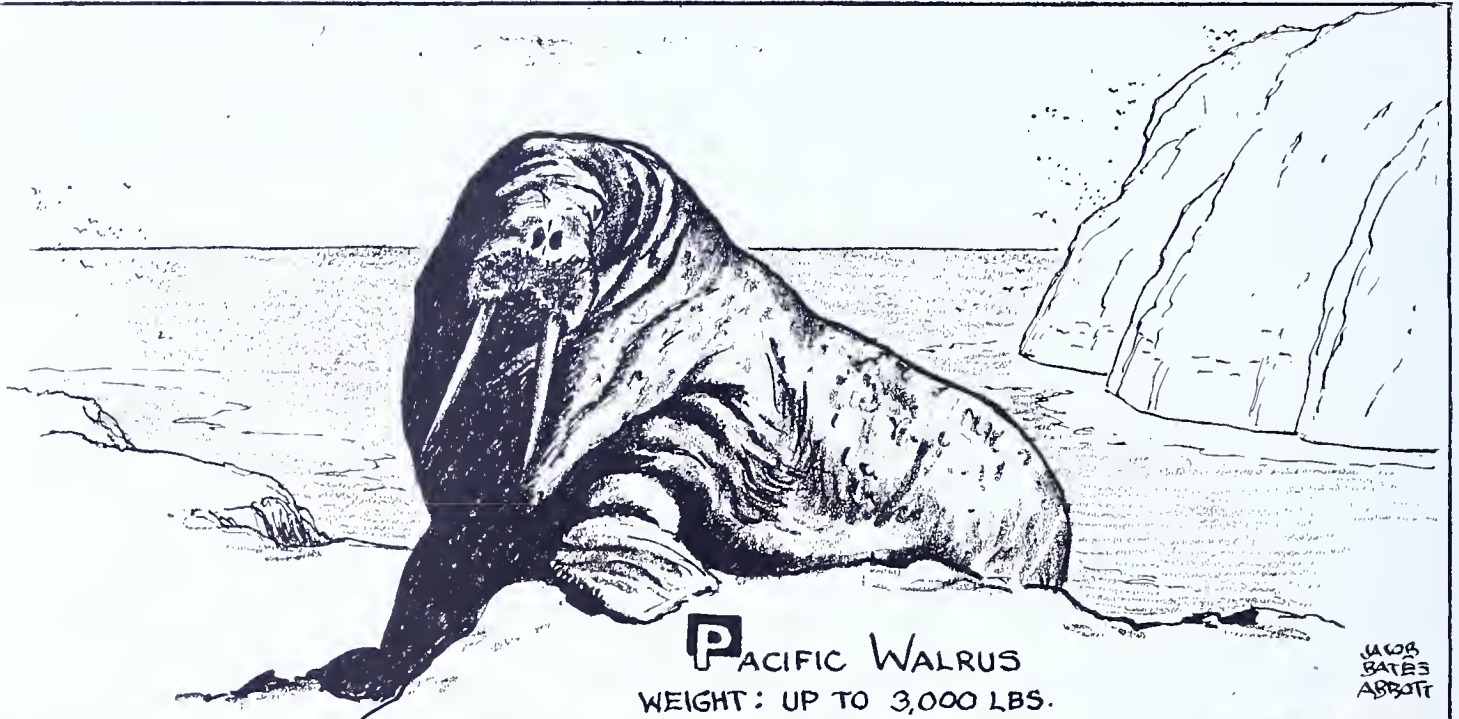
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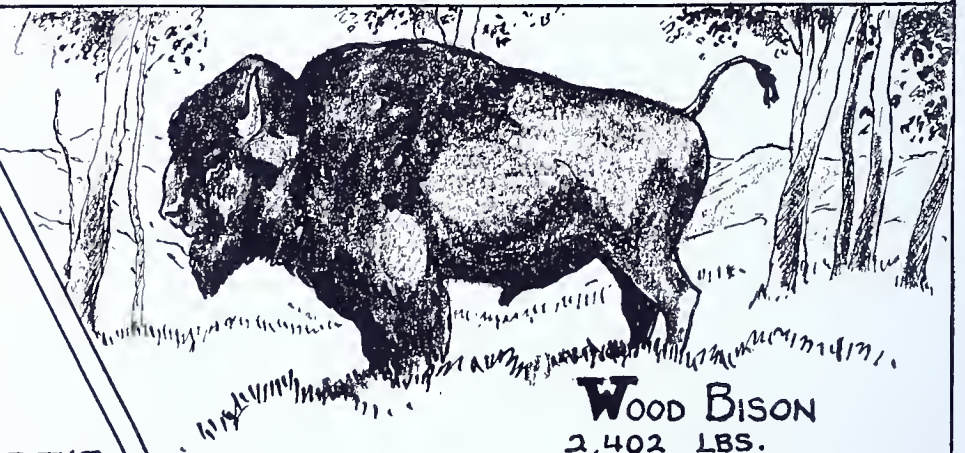
PACIFIC WALRUS
WEIGHT: UP TO 3,000 LBS.

JAMES
BATES
ABBOTT

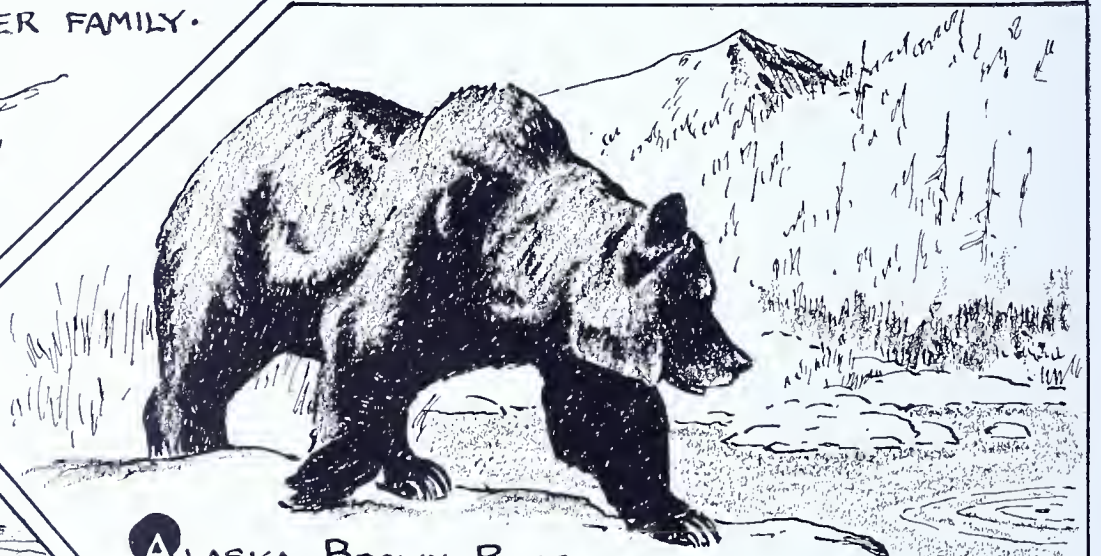


KENAI
MOOSE
1800 LBS.

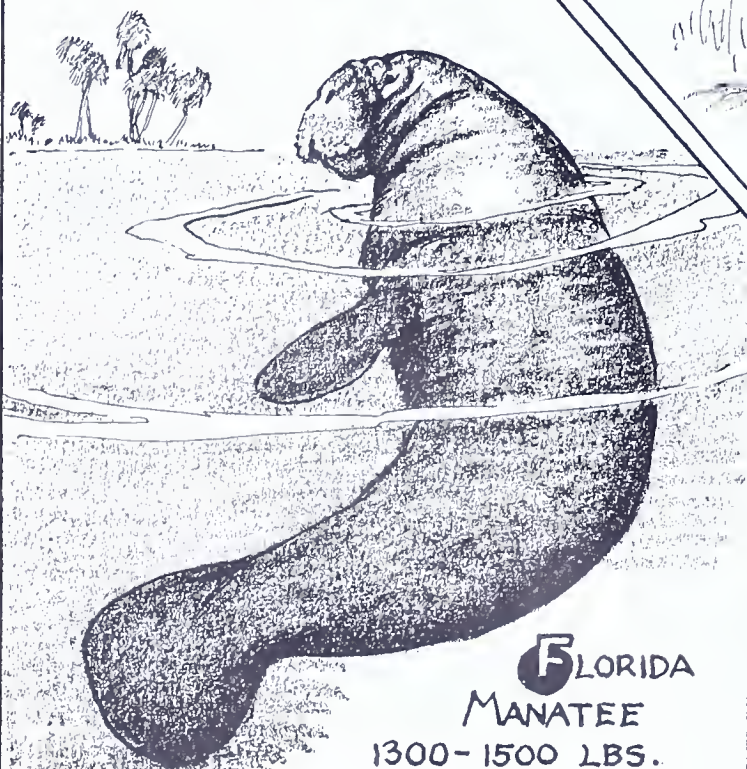
LARGEST OF THE
DEER FAMILY.



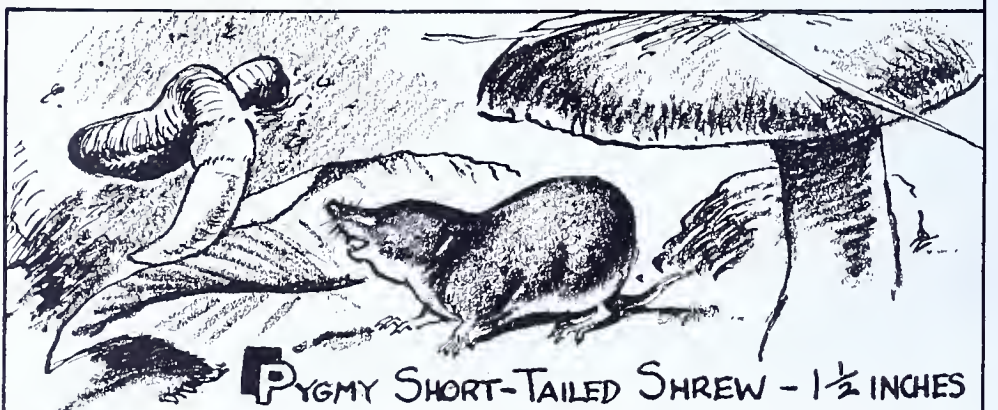
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The GAME NEWS

PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

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COVER

"Striped Skunk"

By

Jacob Bates Abbott



I AM PENN'S WOODS

I am Penn's Woods whose green beauty stretches over half the area of a great Commonwealth. From the low, rolling hillsides overlooking the Delaware to the valleys through which the Allegheny flows, I spread my living mantle over a mighty people who come from near and far to find health and recreation in my wooded cathedrals and to establish their homes in my sheltered recesses.

Beneath my spreading limbs I shelter and feed the wildlife—a grouse, a wild turkey, bear and many others. In my shaded glens a white-tailed deer roams. Upon my mountainsides I hear the call of the whip-poor-will at dusk, while from my rocky crags the scream of the wildcat resounds.

In my vast depths I see life born anew and life ending every day, every year, according to nature's plan. The thickets on my slopes now contain thousands of wobbly-legged deer fawns and in my sunlit plateaus a flock of wild turkey poults scratch for insects under my fallen leaves.

Life is throbbing and bursting forth with all the stirring beauty of my wild flowers and painted butterflies. The songs of birds fill the air about me while the warm glory of the sun urges creation throughout my soul.

But in my woody sinews and beneath my shady bows, death and decay are spreading their cold fingers. Where once walked a young buck deer last summer, now lies a skeleton of whitened bones. Elsewhere, the tender shoots that sprang from moist earth this spring have all been browsed and killed by other deer more fortunate. I can have no future because my young trees are destroyed as fast as they are born.

Down some of my secluded valleys no grouse will send his muffled drummings for many springs to come. His food is gone, his necessities of life taken by too many deer. And along many of my oak covered ridges no wild "tom" may ever strut again, his future supply of acorns, grapes and seeds never to be produced because too many deer have eaten the future trees and shrubs.

Throughout much of my vast domain the story is the same. In severe winters when the snows lie deep beneath my naked limbs, I see death in its cruelest form. The fawn that hid in my sun-speckled thickets in summer will then vainly stagger through the white drifts searching for food. His older and stronger kind will live to pyramid their numbers year by year until they, too, unless harvested by hunters, are left to starve a wasteful death.

I am Penn's Woods whose substance is life to all creatures of the wild and wealth to all mankind. Beneath my green beauty there lies an intricate system of balances and counter-balances, more complicated than those found in the most delicate of machines fashioned by human hands. The energy I put to use is more powerful than that wrapped in an atom and, yet, the slightest flaw in my system may alter the shape of history. Fire or axe, plow or storm, and even deer can nullify my power without reason.

Yet, man—my steward—has generally wasted my resources without purpose, has forgotten the basic fact of balance upon which the world has been built. Before it is too late, man must let forests, fields and wildlife live in proper balance if they are to produce maximum future crops, and insure the world of more and better harvests in the years to come.



SPORTSMEN'S QUIZ--

Conducted by
DON SHINER

1. The term "pricket" may be applied to:
- a. an eight point buck
 - b. a two year old buck
 - c. a deer with an odd number of points
 - d. a deer with velvet horns

2. The holes in this tree were undoubtedly made by a:

- a. owl
- b. flicker
- c. meadow lark
- d. wood thrush

3. Not all black bears are black in color. Some are olive-yellow and others are mouse-colored.

- a. True
- b. False

4. When lost in the forest, you can easily tell direction by observing moss on trees. Moss grows usually on what side of a tree?

- a. North
- b. South
- c. East
- d. West

5. This tree can easily be identified as:

- a. iron wood
- b. shag-bark hickory
- c. white birch
- d. mountain ash

6. The Red Fox is much swifter in movement than his gray cousin.

- a. True
- b. False

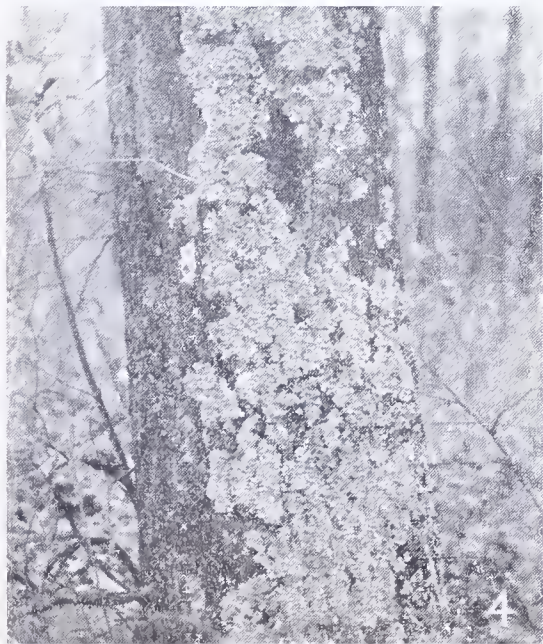
7. Of the pine tree family, one tree loses its needles during the winter:

- a. white pine
- b. spruce
- c. hemlock
- d. larch

8. With the exception of the skunk, no animal possesses such a powerful, penetrating and lasting effucium as do minks.

- a. True
- b. False

(Answers on Page 22)





SPORTSMEN MUST HELP

BY FRANK DUFRESNE

THAT night the members of the little rod and gun club didn't need any motion pictures. My stuff was tame compared with their own impromptu show. Vocal fireworks exploded around the hall; plain language was used. I'm glad I was there to see what can happen when a bunch of good men lose their tempers.

It all started down in a far corner of the hall before meeting time where a knot of members had gathered around a burly chap named Jake. Jake, the yarn-spinner, they called him. They told me afterward, though he didn't amount to much when it came to doing any work for the club, he was always good for a laugh or two with his stories.

But—this night Jake told the wrong story. "Well, I sure cleaned up on the game warden," began Jake that night. "Hit the pot at the end of the rainbow." Jake slipped the cellophane wrapper off a cigar, twisted off the end between his teeth and put a lighter to it. "You shoulda seen what was in the back of my car before I socked it away in cold storage. A horseload of pheasants!"

Knowing how scarce ringnecks were in that part of the country, and of the State's desperate efforts to stock a few covers each fall, the boys perked up at this remark. "How come?" they wanted to know.

"Couple of weeks ago," Jake told them, "I got a tip the wardens were going to turn loose some cocks down on Bunker's Point—you know, that place where the old Bunker farm has all grown up to weeds—" Jake blew a smoke ring. "Just before sundown last night they did it. They were real sly about

it, but I saw them do it, and this morning I cleaned up." He nudged one of the members with his heavy elbow. "Old Jake, the fox, eh?"

Harry Jones, who spends practically every free hour in the open with his teen age twin boys, and who generally just sits around and listens, surprised everybody when he said quietly to big Jake, "I don't like the way you use that word fox. I got some respect for a fox. The name I have in mind, Jake, is polecat."

That started it. From my end of the hall I heard the ruckus, and saw the boys holding Jake and Harry Jones apart. Pretty soon they let Jake go and he stalked angrily out of the hall. By this time word had spread around. The boys were shaking Harry's hand and clapping him on the back.

They quieted down enough to watch the motion picture, but as soon as the lights were on again they called a special session. They voted Jake out of the club. This I could understand, but what followed next was something new to me. The secretary was instructed to write a letter to the game warden, giving names, dates and places.

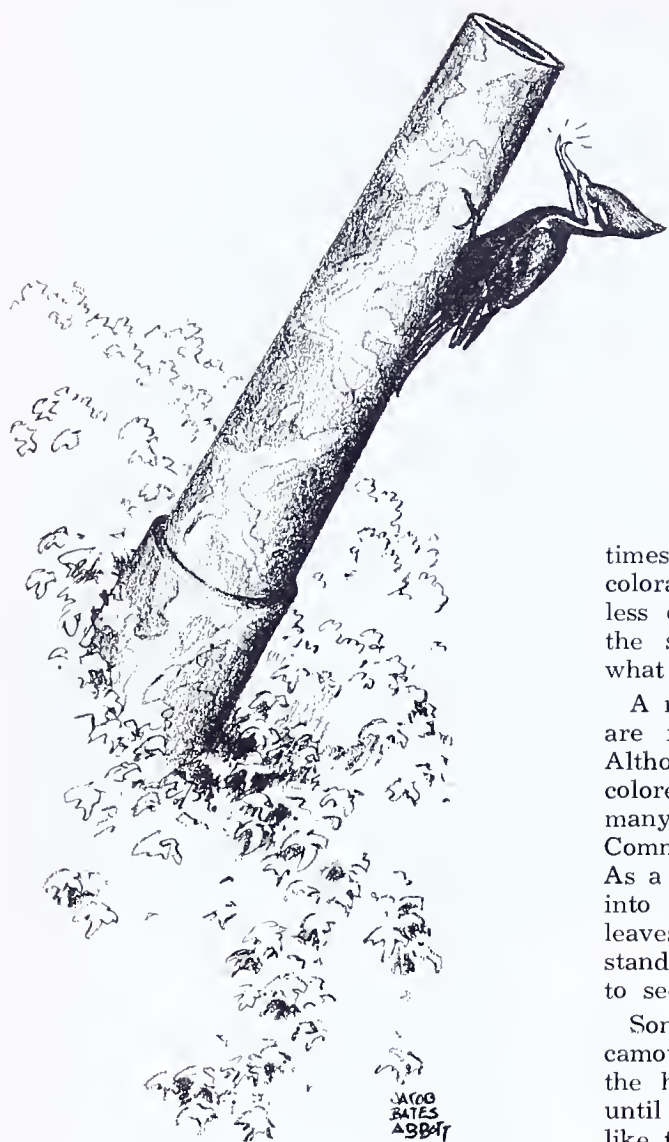
Going home on the train that night I couldn't help thinking that not only club members, but game administrators, outdoor columnists, and the general public are no longer pulling their punches on the hunter or fisherman who cheats. Administrators whose job it is to provide the game and fish for an ever growing multitude no longer regard the poacher's take as a minor factor. Sportsmen who try to play the game fair are be-

ginning to realize that a small minority group of chiselers are smirching the good name of all outdoorsmen, and they don't like it. Disrespect for law, for farmer's properties, for ethics of what should be the finest form of outdoor recreation has reached a point where the decent sportsman just can't sit back and ignore it any longer. If he values the sport for which he and 25 million other licensed anglers and gunners annually spend close to 4 billion dollars he thinks he owes it to himself to look into this moral breakdown that has split his ranks.

How bad is it? Plenty! Check with the outdoor writers of the country, who are, after all, simply reflectors of public, State and Federal opinions. They'll tell you that in the good old days their main job was to tell Joe Doakes where the bass was hitting, how the quail were wintering, and about that big one Joe landed in Gooch's Pond. But now, prompted by bales of complaining letters, many of the columnists are crusading for better sportsmanship. Carefully at first, they began calling attention to weak spots, then when the reader response reached heavy volume they really started to crack down on the outdoor outlaw.

Why are good ethics going to pot? Here are some of the reasons you'll hear. In the first place, they say, the hunter and fisherman is probably no better or worse than any other person. He is just drifting along on the same outgoing tide. The same era that spawned bribery in so simple a matter as

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CAMOUFLAGE IN NATURE

By BILL WOLF

times it is what is known as "protective coloration," sometimes it is mimicry. Regardless of what form it takes, it all leads to the same end: Making things look like what they ain't.

A number of birds found in Pennsylvania are fine examples of natural camouflage. Although we do have a number of brilliantly-colored birds, have you ever noticed how so many are dull and of a nondescript color? Commonplace tans and browns predominate. As a result, these birds fade inconspicuously into the background of brush, grasses and leaves where they feed and live. They don't stand out like sore thumbs for every predator to see.

Some of our game birds are perfectly camouflaged. Grouse and quail can cower at the hunter's very feet without being seen until they take off in noisy flight. They look like the grass and leaves in which they are found. The woodcock blends into its background perfectly except when in motion. And it isn't pure accident that the males among wild ducks are brilliantly colored and the females are as drab as a girl without makeup in a sackcloth dress. The hen duck is more important to the species than the male and she must survive to bring up the young. Her chances of survival are much better because she usually is a dull tan, hard to see around the shoreline of a pond or stream. Have you ever watched a hen duck moving like a brown and silent shadow against a similarly-colored bank, herding her young to safety upon your approach?

Even the gaudy cock pheasant, which is so bright a bird in the hunter's bag, is anything but conspicuous in the field. His general overall color—despite metallic blue feathers here and there and a pronounced ring around his neck—is a ruddy bronze. When he squats down in a field or woods, he might be a bush with a touch of color in the leaves, or a clump of reddish grass. Best proof of this is to flush a cock pheasant from a field of stubble only a few inches high. It can remain concealed until you almost step on it, although you would swear nothing so large as a pheasant could possibly hide in such cover.

Such protective coloring evolved long before man appeared on the scene as a predator. All the smaller birds are in constant danger from other predators—the bird-killing hawks, eagles, foxes, owls, wild cats—and the less attention they draw to themselves, the better off they are.

Well, then, you might ask, why aren't the brightly colored birds killed? It's a good question, but one that, is easily answered.

The scarlet tanagers, the goldfinches, American redstarts and other similar patches of color in the bird world don't expose themselves as freely as do the camouflaged birds. They are not often seen except as a flash of color in the trees where the foliage protects them from cruising predators. Perhaps they realize that they stand out like signal flags and thus keep concealed more than the sparrows, thrushes and other dull birds. These more quietly-colored birds can move about freely. An exception to greater secretiveness on the part of the bright birds is the cardinal. The male is fond of perching high on a dead limb of a big tree, exposed to all the world, and there singing its challenging song. However, we can't forget that its exposed perch also makes it able to see any enemies from any direction long before they can cause any harm.

The birds which feed and spend much of their time on the ground are the ones that need the protective coloration and usually have it. A whippoorwill on the ground is just about the closest approach to invisibility as we can find. In fact, a whippoorwill probably is seen less often than any other of our common birds. It is strictly nocturnal in its habits and when it is not feeding by night, it is resting so securely in its pro-

JUST what does the term "camouflage" mean to you? If you are a veteran of World Wars I or II, it may mean many things. Perhaps it means brush piled around an artillery emplacement to make it look like a clump of small trees and thus conceal it. Maybe it means a big awning of cloth, or of wire and grass raised above the ground to conceal troops, machinery, or airplanes beneath it. Such awnings were painted to resemble the surrounding terrain when seen from the air by an enemy plane. Perhaps it means the jungle cloth used in the South Pacific, splotted with lights and shadows to imitate the jungle itself, such as was used in making uniforms.

Or, possibly, it means painting ships with varied stripes and lines to break up their silhouettes and protect them from submarines, a practice that was common in the first World War. Regardless of what the word "camouflage" means to any individual, its basic meaning is "to disguise," to so change the shape or color of something that it resembles an entirely different thing. The crow hunter who covers himself with a white sheet in snowy weather to conceal himself from crows is camouflaged. The airplane with light blue or gray underwings is camouflaged so that it can't be easily made out from the ground.

These are deliberate attempts at camouflage by man, that most imitative of all creatures. However, a natural camouflage can be observed by the sharp-eyed in the wilds at almost any season of the year. Old Lady Nature has given many of her children a natural form of protection against enemies. This sometimes is outright camouflage, some-



protective coloration that it's almost necessary to step on it to frighten it out of hiding. A person walking through the woods could look directly at a screech owl in its gray phase and not realize he was seeing anything except part of a tree trunk. The owl's dull grey coat blends right into the trunk against which it presses its body when perched on a limb.

When an intruder approaches, the least bittern poses with its bill thrust high into the air, exposing its streaked breast in which upright light and dark stripes blend right into the rush and reed stems where the bittern usually is found. It depends so much upon this camouflage that it is almost possible to pick up one before it will desert the pose.

The development of camouflage and protective coloration in the animal world is open to much argument. However, the most logical explanation is that those creatures which most resembled their everyday background survived and reproduced, while their more conspicuous members of the same family were killed off. In reproduction, they transmitted the coloration which helped protect them—just as we can breed for color in animals and birds today. Eventually, well-protected offspring were the regular result and not the exception as it must have been in the beginning.

Sometimes, camouflage is necessary only during a brief and relatively helpless period. Take our whitetail deer, for example. When the fawns are born, they are dappled with light and dark spots which blends in with the dappled forest floor with its alternate flecks of sunlight and shadows. While the fawn is spindly-legged and helpless, it retains this coloration; but when it matures and becomes fleet of foot it develops the normal rusty to tan color of the adult deer. Since there are no more wolves or mountain lions in Pennsylvania's deer range, the white-tails have no more natural enemies; but at one time it was very necessary for the slow fawn to have protection. Men and wild dogs are the only things that prey on deer now in this State.

A weak animal has several ways of eluding its enemies. It can run away rapidly. It can conceal itself in a burrow, den or hollow tree. It can squat still and hope it won't be seen. In the latter case, protective coloration often means the difference between life and death.

The rabbit combines all three methods. When hard pressed, it will plunge down a groundhog burrow or into the crevices of a stone fence. It is fast and can run rapidly for short distances. If it prefers to crouch in its form, it is almost invisible because of its dull gray-tan coloring. When squatting still in grass or leaves, the only visible parts to the passing glance are its large eyes. They can't be camouflaged.

There's a white ghost in some parts of Pennsylvania during winter. It is seldom seen by human beings even where it is plentiful, but sometimes it is glimpsed as a fast-moving flash of white against the white snow. This ghost is dressed in white, as a ghost should be, and its costume represents one of Nature's cleverest disguises.

The ghost, of course, is the varying hare, or snowshoe rabbit which changes from a brown summer dress to a white one in winter for perfect camouflage when snow is on the ground. This hare is considerably



larger than the cottontail rabbit, has large and padded hind feet which serve as natural snowshoes, and it is known locally in the mountain country as the jackrabbit although it is no more than a distant relative of the western jack. Its most distinguished feature, however, is the change that takes place in its coat when winter comes. All summer long, it wears brown; but soon after the first snows fall its hair turns pure white. It's an elusive animal at all times, but it is especially difficult to see against the snow. If Nature crosses it up, however, and the ground is bare of snow—as sometimes happens in winter—the snowshoe's camouflage turns out to be its dead giveaway and it is as conspicuous as a white flag against a dark background.

In the colder parts of their Pennsylvania range, our weasels also change to a winter disguise of white with the arrival of snow. The color change in weasels and snowshoe rabbits differs from albinism. An albino is permanently white and usually has light, rather pinkish eyes. The winter camouflage of weasels and varying hares is seasonal and the eyes remain dark at all times.

At first sight, the gray squirrel doesn't seem to have any camouflage because it is readily visible in the forest—but gray squirrels prefer to feed in the dusk of evening and then their nondescript color fades into the twilight and they are nearly invisible. Red squirrels are tough little animals, fast enough and aggressive enough so they have little fear and little need of protective coloration. Some large animals—such as bears—have no natural enemies in this State any more, and some smaller ones—such as the mink—are speedy, secretive and formidable fighters. They have little need of camouflage and don't possess any.

Most of our snakes and other reptiles and amphibians blend well into their habitat. It is extremely difficult to get a clear glimpse of the smooth green snake among the grasses where it finds its food. It is not only fast and wary, but its color is a perfect camouflage. Our rattlesnakes are the shade of the rocks among which they are so often found. The markings on our poisonous copperheads

and somewhat similar watersnakes make a camouflage pattern that helps hide them. The green, and green and yellow frogs fit right into their environment. The hellbender, which is rarely seen by day anyhow, usually is the same color as the rocks on which it occasionally rests out of water.

However, some of our common snakes and turtles are brightly colored, thus indicating that Nature does not always take care of its own. There is no good reason why the smooth green snake should have perfect camouflage and the common garter snake should advertise its presence with fairly bright yellow stripes on its body.

This brings us to mimicry, which is a form of camouflage. In this, there often is no attempt at concealment through coloring or shape or markings. Instead, the mimic which is harmless tries to look like something that is dangerous or unpleasant as food. It's a mighty interesting chapter in Nature's book.

A number of non-poisonous snakes try to imitate rattlesnakes by vibrating their tails against dry leaves, thus setting up a buzzing sound such as the one that rattlers make. There is no doubt that this frightens anyone or anything too scared to investigate. The puff adder of Pennsylvania, or the hog-nosed snake, to give it another of its many names, manages to look very vicious although it couldn't harm anyone. When threatened, it can raise a hood around its neck to make it look like a deadly cobra. It hisses loudly. It strikes like a poisonous snake, but it seldom even opens its mouth. And if all this fails to scare the intruder away, the puff adder will roll over and play dead. It is also called the sand viper or hissing adder.

The eastern scarlet snake, which may possibly enter Pennsylvania's southern counties, looks so much like the extremely deadly southern coral snake that anyone would give it a wide berth—which is the object of looking like a poisonous relative. Where one snake imitates another, it is always the harmless species trying to look like a deadly one.

Camouflage and mimicry reach perfection in the insect world. There are harmless flies that look like hornets that sting. There are

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OUTDOOR KID

By HAL HARRISON

"Now, Jane, don't tell me the field is FULL of holes," Billy countered with a note of contempt for the female habit of exaggeration.

"All right, Mr. Know-It-All, come along and I'll show you."

With that Jane was off on a run, heading for Pleasant Hill Farm at the end of the road. Billy and Pal followed.

"There's the first one," Jane announced as the trio came to the edge of the hay field that borders the alder marsh at the east end of the property.

Jane pointed to a freshly-dug opening in the tall grass. The entrance was quite large but it narrowed quickly to a hole about the size of a small dinner plate. A big mound of yellow clay was thrown back of the opening. It was quite evident that something had been very busy to accomplish all this digging.

"Well, well," exclaimed Billy, backing away and surveying the scene with his hands on his hips, "so you don't know what did that, eh?"

"No, I don't," admitted his sister, "and what's more there are a lot more of them all the way down along this edge."

"My good woman, you are looking at a groundhog hole," declared Billy with an air of great authority. "What's more, if the rest of them look like this one, they are groundhog holes too," he added.

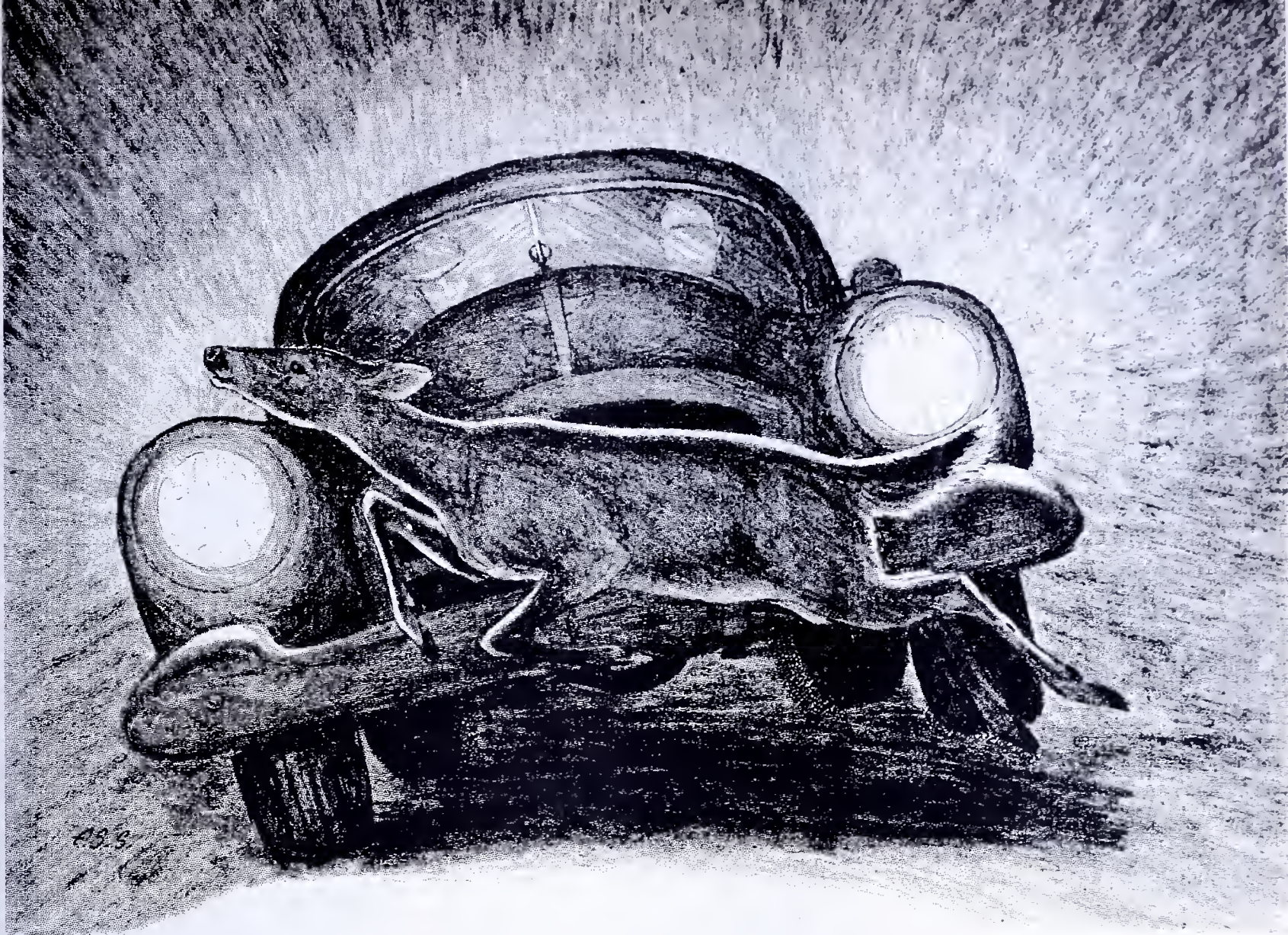
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"Hey, Billy, have you been over to Pleasant Hill Farm lately?"

It was Jane calling to her brother as he wheeled up the walk on his bicycle with Pal trailing a few steps behind.

"No, what's up?" asked Billy as he jumped from his bike and lowered the stander.

"I don't know, but the field near the swamp is full of big holes," Jane declared, "and I don't know what's making them."



"DARN DEAR ACCIDENT"

By DON SHINER

TOM jammed on the brakes as a blurred object bounded across the road, but it was too late! A crash crumpled the front of the car and the clanging of metal rang through the stillness as the car skidded along the road and squealed to a stop. All was quiet again in the surrounding woodland.

It all started when Tom decided to go crow hunting. He and Harry had planned for a week in advance that this Saturday morning they would go to McClane's farm where, according to reports, a great flock of crows were roosting. They had assembled their 410 shot guns, crow callers, camouflaged canvas blind and a jug of coffee. Grabbing only a few minutes of "shut-eye" they scrambled to the car and were on their way at 3 A.M. It was a good hour's drive to the farm and they wanted to be on the spot at sunrise.

They would have made it, too, if Tom had not tried to squeeze the distance into a flat 40 minutes. The tires were busily singing as they passed from the outlying farm district into the wooded area. The road was straight and smooth and the tall trees on each side of the road were like sentries guarding the highway. The forest seemed lifeless and dark but the car's headlights pierced the darkness, danced for a moment on the pebbles and leaves but then scrambled onward showing a clear path for Tom to drive.

Conservation of wildlife should not end with the standing of the gun in the cabinet, but should extend to even our Sunday afternoon pleasure trip!

Harry was just saying, "Last time I was out at McClane's farm for crows I strained by 'caller' screaming for those black birds. Got 14 of 'em that day and missed about that many too."

Tom had glanced at Harry. When he again focused his eyes on the road, a brownish-grey blur leaped from the side of the road and smacked in to the front of the car. It made a terrific crash. He jammed on the brakes but it was too late. The oncoming headlights of the car, like two massive eyes shining in the darkness, had bewildered a deer and it leaped straight into the oncoming car. The car swerved from the sudden braking and then skidded to the side of the road some distance away.

Both Tom and Harry were shaken up and could not visualize just what had happened. A view of the front end of the car told them the tale. There was blood dripping from the crumpled fenders and clots of hair smeared on the grill and bumper. One headlight was smashed and the glass scattered about the road.

A sizable brick weight displaced Tom's stomach when he surveyed the damage. He searched for a flash-light in the glove compartment of the car and upon finding it, he and Harry walked back towards the place where they had hit the deer. Here was the place evidenced by the broken headlight glass and bunches of red stained fur. Tom directed the light beam to the side of the road and there the deer lay. It has just made it to the side of the highway and collapsed. It was a large doe and evidence indicated it soon would have been a mother, perhaps of twin fawns. That, however, could never be since the mother deer lay dead with a badly mangled head and shoulders and compound fractured legs.

Did Tom and Harry continue on to McClane's farm and to their crow hunting after they notified a warden? What's your guess? Could they have enjoyed any sport immediately after the accident? Definitely no!

Looking over the accident, there is always that element of question. Could that accident have been avoided? If Tom had not tried to squeeze an hour's drive into a flat 40 minutes, perhaps it could have been avoided. Certainly a chance to save 20 minutes was not worth a possible accident plus a day of sport totally disrupted. Often

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STATE GAME LANDS NO. 146

*Prepared for the
Field Management Bureau*

**By JAMES A. BROWN,
SAA Division "F"**

If you live in Western Pennsylvania, there is little doubt that the word Pymatuning will bring to mind the Wild Waterfowl Refuge on the upper Pymatuning Reservoir. You are probably aware of the fact that it is the only Migratory Waterfowl Refuge of any extent in Pennsylvania. And further, if you are a duck hunter, you won't even question it's value as a means, through good management, of improving the duck hunting in the area. But suppose you are a rabbit hunter, or a pheasant hunter, or a squirrel hunter. What then? What is the Game Commission doing to improve your sport? To answer the last question, let us look at a tract of Game Land in Crawford County, an area not as well known as the Pymatuning Refuge, but none-the-less just as important.

State Game Lands #146 is located in Richland Township, Crawford County. It was purchased in 1938 and comprises 496 acres. When the land was acquired, about sixty of its acres were in old worn out cultivated fields and pasture land, and the remainder was brush and forest land. It is typical of most of the game lands in the Northwestern part of the state in that it is a relatively small

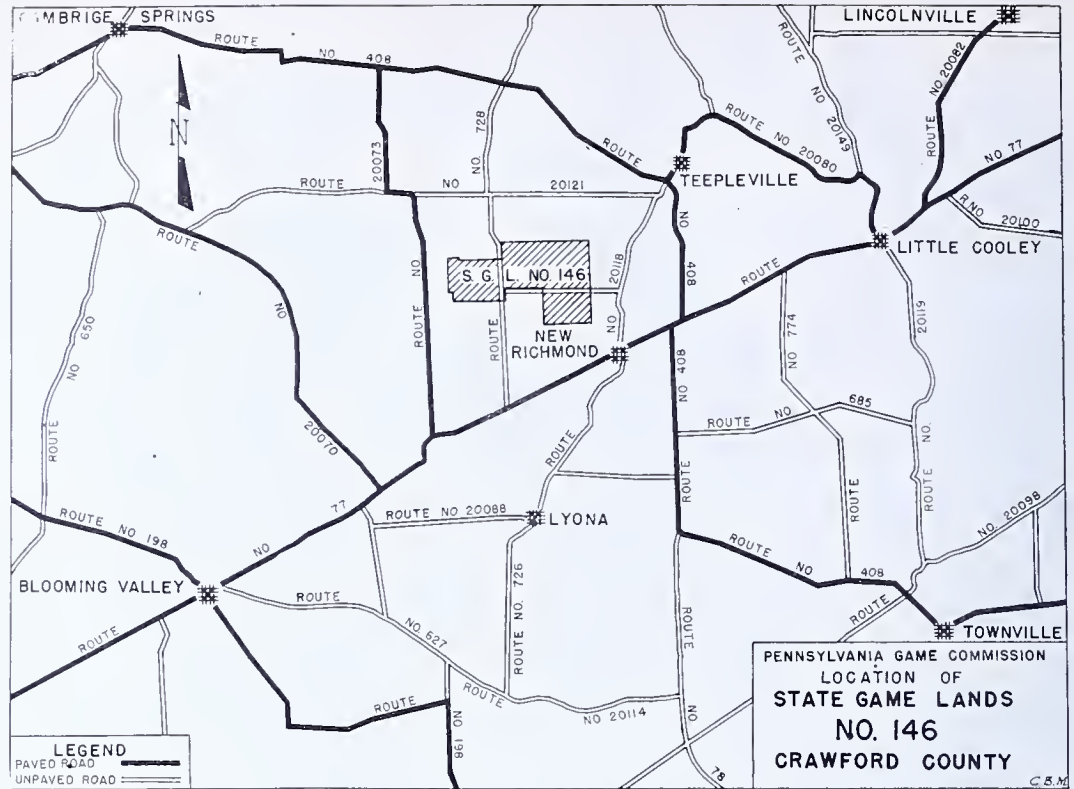
tract of game land and is located in small game territory. We were able to purchase it because the former owners were no longer able to operate it on a paying basis. The farm land had become worn out. The mature timber on most of the tract had been harvested. The open land was devoid of cover. The forested area was lacking, primarily, in openings for small game. From the management standpoint, the open land presented a different problem than did the forested area.

Because of the lack of cover in the open fields and pasture lands, the first management problem was to provide a sufficient amount of cover close to an available food supply. This was done by planting fifteen acres in Scotch Pine on four different plots. The plantings were made in gullies and other areas hard to cultivate. These plantings made

it possible for small game to travel from protective cover to their feeding areas without being exposed to the ever present danger of predators.

The second management problem on the open land was to provide an adequate supply of food—especially winter food. To accomplish this phase of the problem, about ten acres were planted in food producing trees and shrubs. Among those shrubs planted was an experimental planting of Multi-flora Rose. It was planted in two ways. One planting was a long narrow strip on both sides of a drainage ditch, the other in small clumps. The strip planting, after six years, now provides an excellent barrier to man and beast. It is about six feet high and eight feet wide. It serves as a travel lane for small game animals and the fruit as an emergency food supply during severe winter months. Its value to song birds is evident. This Spring, eleven nests were counted along its 450 foot length. The clump plantings of Multi-flora Rose provide excellent escape cover.

To provide openings in the forested area of the tract, clear cuttings were first made. To date, three such areas have been opened. They total about twelve acres. Areas of inferior timber and brush were selected for the clear cuttings. In these areas everything was cut with the exception of a few old hollow trees which were left standing as den trees. Three additional plots totalling about 40 acres have been opened up by lumbering operations and six plots, ranging from two to five acres, were opened by use of the bulldozer. All three methods of creating openings in the forested area have proven successful on these lands. The fallen timber and brush has provided excellent escape cover and loafing areas for the wildlife on the tract. And since the sun light has been able to get to the ground, new vegetation has sprung up, thus providing additional food. Most prevalent among the new growth is blackberry. Its fruit is used for food by Ringneck Pheasants and Grouse during the late fall and early winter while the stock of the blackberry furnishes food for rabbits throughout the winter.





M. J. DeBerti Photo

Champion Sam L's Skyhigh, winner of the Pennsylvania Grouse Championship, March, 1949.

SAM L's Skyhigh is the new Pennsylvania Open Grouse Dog Champion. A rather good sized English setter, conditioned to a "T" and white, black and tan in color, Skyhigh was sired by that great producing sire, Equity, owned by Virgil Hawse and is presently owned by Sam Light, Punxsutawney sportsman. He was handled in the championship by the Johnsonburg trainer and professional, Larry Tuttle.

Just over four years old, this mighty dog has been in the limelight for the past two years. This is not his first field trial win. When I watched this handsome setter run two years ago in the aspen hardwood flats of Forest County, a brilliant future was predicted for him. Since then he has placed first in the Venango Grouse Trial feature \$1,000 stake, first in the Pennsylvania-Venango Grouse Trial All-Age Stake, first in the Lakes States Grouse Trial All-Age Stake; was runner-up in the New England Championship, second in the Cuba Lake Grouse Trial All-Age Stake, and first in the Venango Amateur Grouse Trial All-Age.

Skyhigh succeeds the brilliant dark setter, Hall's Black Rocket, who was the last dog to win this important title in 1946. Black Rocket was a Triple Grouse Champion, having won three grouse dog championships—the only dog in grouse trial history to accomplish the feat. Last fall Skyhigh made a bold bid for the Grand National Grouse Dog Championship but the judges thought he was a little ragged in his ground work and failed to give the great setter another opportunity in the two-hour finals. This year, however, in one of the most brilliant but grueling two-hour races and in hot competition with a grand little pointer bitch, Village Country Lassie owned by Edgar McKean of Pittsburgh, the rugged setter really went bird hunting. This time nothing could stop him from reaching the top.

It was a slashing performance this great handsome setter had to run to cop this coveted title—the highest honor in the Pennsylvania woods on the grandest bird that ever drummed on an old log, "Old Thunder," king of all game birds. The title wasn't just handed over to him. Right on his heels

were at least five more dogs that stood toe to toe, swapping punches, matching sensitive nostrils, and running their big hearts out right up to the bell. Although a total of eleven setters and one pointer were drawn to compete, only five setters and one pointer were called back for the two-hour finals. It can be said, however, that every dog drawn in this championship was a credit to its handler and owner and they should be proud of them.

In almost every field trial the unexpected always happens and at this championship there were heartaches and disappointments.

GREATEST OF THEM ALL

By MARC J. De BERTI

For instance, we had that grand young three-year-old setter, Punxsutawney Red, owned and handled completely by an amateur, Dr. L. W. Anderson, of Punxsutawney. Red had just the week before copped the rich Venango All-Age Stake, besting Skyhigh in a most definite manner. Here, in his qualifying hour, Red was really laying down a championship race. Everyone realized that here was a young dog that had to be reckoned with. Crossing Laurel Run on the Loleta Refuge, Red was cutting big swaths in the country, searching every nook and corner for birds. As he crossed in front of the gallery in apparently barren pole-timber growth, he suddenly hit the scent of birds. He hit his bird so hard that his back was low while his tail remained high and proud.

And then it happened! Right from under a fallen aspen top walked a cock grouse just as unconcerned as ever. As Dr. Anderson walked up to the pointing Red to flush the bird, it took wing and barely missed Red's head by inches. The temptation was too strong and Red made one—just one, mind you—jump for the fleeing bird. The dog immediately stopped at command and was steady to the shot. But the damage was done and this grand setter will have to wait until next fall for another try.

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Hal Harrison Photo

The start of the crucial second series brace. Left is Village Country Lassie with Handler Carl Beattie; right is Sam L's Skyhigh, the new champion, with his handler, Larry Tuttle. Immediately behind is Stake Manager Edgar Nash. On horseback, left to right: Reporter Marc DeBerti, Judges C. W. Harrigan, Dell Todd, and C. Ray McWilliams; and Club Secretary Edgar D. McKean.

HARCHER stretched, yawned and breathed deep of the fresh morning air of early summer. Just breaking dawn, the sun presently showered things in a flood of golden light. The sweet song of birds filled the air as the happy laughter of running water tangled with the soft sound of wind in the trees, while the warmth of the sun banished the last dewdrops, making this a day to be remembered.

But Harcher wasn't happy. He had a grouch on. Looking at the black opening of his home, he shuddered. Last night was enough for him, he was leaving. Not getting along with the rest of the family, he had decided to seek his fortune far from home. Wearing his summer suit, composed of a black coat and pure white cap, he was going where he knew not—just going.

"Runt, am I?", he mused, "Well, maybe, but I'm not afraid of any of them, or any one else." And he wasn't. Of courage he had plenty. Taciturn and gloomy he might be, a sort of a lone wolf type of fellow, he wasn't afraid of anything that walked, swam, flew or burrowed.

He chuckled as he remembered seeing, one day in the woods, a strange sort of tree with fur instead of bark on it. On looking up he was astonished that, instead of a tree, it was a strange animal. This animal had sharp eyes, large bushy tail, a long pointed nose, and fled in terror through the woods at sight of little Harcher.

After meandering down the steep mountainside, he encountered some difficulty at the bottom, getting through a mass of curious sharp red stones. Beyond these he stared in amazement. To his right and left, far as the eye could see, stretched a broad level black plain. The distance across it wasn't great, to where more red stones bordered it. Half way over a most fearful noise was heard approaching. A split second blackout of the sun was followed immediately by a very hurricane of wind that sent poor Harcher sprawling end over end. Picking himself up unhurt, he crossed, then followed along the edge of the plain by the red stones.

So well did his black coat match the color of the road that, from above, it looked as if only a tiny white dot moved. Soon there was another roar, another wind, and again he went sprawling. A terrific screeching greeted Harcher's ears, followed by a dead silence. Followed another sound such as flat stones make when dropped on still water. Another from way up, as of soft thunder, from which issued—"Well, I'll be darned," cried a delighted voice, "A skunk!", "A tiny lost baby skunk!"

We were enjoying the ride home from Bentleyville, after a hard days work there,



"HARCHER"

By CLIFFORD YOUNG

the two places being nine miles apart, as the snakes wriggle, or better, as the creek winds. Dotted with farm houses, a few mining towns, occasional traces of old mills, the Pigeon Creek valley is a peaceful, picturesque, cool place at this time of the year. As we sped along I happened to notice a small white spot on the edge of the road. "Gosh," I thought, "it seemed to be—Who-a'." I yelled. (this word seems to be instinctively imbedded in people, even those who never drove a horse and buggy. To illustrate—Remember how the old Model T's used to plague you when parked, by slyly inching along, then stopping? Then repeat and stop. Well, this one, finding its owner at a distance, suddenly threw caution to the winds and started wildly down the hill, with its horrified owner running frantically after it, yelling "Who-a! Who-a! Who-a!") Followed a quick swerve to the left, another to the right, and a screeching stop. I hurried back and there came Mr. Harcher, with the slow measured tread of an elephant, head lowered, and swinging slowly, absolutely fearless. On seeing me, he backed, bared his teeth and defied me to do my dang-dast.

Picking him up by the nape of the neck, I immediately christened him "Mr. Harcher," in honor of my driving companion. Harcher was beautiful to behold. (I mean the little one). A true character, his coat being a tar black, except for the perfectly round, pure white spot about the size of an old time three cent piece, setting smack on the top of

his dome; and a very few white hairs, at the extreme tip of his tail. As I laid him on my left arm, he dove, in slow motion, into the crook of my elbow, and buried his head there. No amount of coaxing could bring him forth, so I dragged him out, put him in my vest pocket, where he remained for the rest of the journey, with his head sticking out, surveying us calmly.

Hailed with delight at home, he lived the life of a king. Being waited on hand and foot, his every need was supplied, as was only befitting such a tiny, white crowned monarch. Being terribly hungry, he buried his mouth and snout into a pan of milk, and drank greedily. He drank himself into a fit of grogginess then exhausted, fell into a deep sleep of the innocent.

Friendly, fearless, and intelligent, his only enemies were the dogs, who growled, took one whiff then departed quickly. He learned to have much fun with a small match box, which he tossed into the air with his mouth. All the neighborhood people, especially boys, and distant ones too, came to view this little king's makeup, and watch his curious antics. You'd think, with all this, he'd be content, but not Mr. Harcher. One morning he was gone. A hole in the cardboard box, and an open door told the story. Tired of the soft life, I guess, he longed for the ways of the wild.

Kansas is the one state having no deer in the wild state. What deer it has are confined in parks.

After the large feathers have been picked from waterfowl or game birds, soak the bird in well salted water for a short time and the pin feathers will come out easily.

The eastern puma or panther, long considered extinct, has been discovered in New Brunswick.

Raccoon gets its name from the fact it washes its food before eating it. The name raccoon is a derivation of the Indian name "arathcone" meaning "the washer."

Just before the molting period, ducks and geese fly to bodies of water where they will be safe from land enemies. The reason is the fact that they molt their primary feathers all at one time and, for a short period, cannot fly.





WILDLIFE OF CLINTON COUNTY

By Col. HENRY W. SHOEMAKER

PROBABLY no event has ever occurred in Beech Creek township that caused more excitement than the great "Ring Hunt" which took place in the fall of 1849. It was well known that the woods abounded with game of various kinds and extensive preparations were made to capture it wholesale. A force of 300 men from all parts of the surrounding country assembled at Beech Creek village that cold autumn morning. The eager hunters were armed with various implements of warfare and husbandry. Some had pitchforks, others had hickory poles with bayonets attached, some had pike poles, and, it is reported, some even had fishing spears. With everything in readiness, the "hunt" was soon organized.

The party was divided into two columns, James McGhee taking charge of one while James Linn took charge of the other. None of the men carried guns except for six of the most expert marksmen. The place selected for the hunt was known as the "David improvement" in Tangascottac Valley about five miles northwest of Beech Creek. According to plan, the two columns were to keep abreast of each other until they reached a point about a mile from the "improvement" when they were to separate and encircle the "clearing" which consisted of 10 acres.

Thus a circle of hunters, armed to the teeth, was formed, enclosing an area of two miles in diameter. At the sound of a bugle and as the flanks of the two columns met, all the men advanced toward the cleared field in the center where the deer, bears, panthers, and wolves were to be driven and shot by the six expert marksmen. As the line closed in, the men yelled and shouted and flourished their pitch-forks and pike-poles enough to frighten every wild animal in Tangascottac Valley. Many deer and other kinds of wildlife were in the circle, but because of a lack of system in approaching the center, breeches were made in the line through which the game fled in terror. Seven deer were seen to escape through a single opening and by the time the clearing was reached by the hunters, not a wild animal was in the circle. Thus, the whole party returned to their homes fully convinced that they did not understand "ring hunting."

Hunting in the Beech Creek region is still a full-scale activity, of course, but hunting methods have changed considerably from those used in the early days. For instance, a hundred years ago large iron traps with grapple hooks were used for hunting bears. These traps were placed in bruin's favorite haunts and occasionally, a bear that had been caught in one of them would seek a rock upon which he could beat the trap until it was broken, thus freeing himself.

One of the largest bears ever seen in the township was caught in the spring of 1875 by James McGhee on Monument Run. He had set a large trap a few days previous and sent his two boys to see if the trap had been disturbed. When within about 50 yards of the trap-site, the boys discovered a bear in the trap. The bear had managed to drag the trap until the grapple hook caught fast in a tree. The boys each fired at the bear, killing it instantly. They then rolled it down the hill upon which they had found it but after reaching a creek bottom, they were unable to move it until it was skinned and quartered. They then procured a wagon and took the carcass home to find that it weighed over 400 pounds.

During the year 1871 George Hastings and James David, while hunting on Big Run, discovered signs of some wild animal. Setting their dogs on the trail, they soon found themselves face to face with two large panthers which were soon killed and scalped. The county paid a 12-dollar bounty on panthers at the time.

The pioneers of Chapman had their full share of adventures and narrow escapes, too. A. J. Quigley reports of an instance in which two of the town's early citizens wounded a large bear which quickly pursued them. They only escaped by the miraculous intervention of a fallen tree, the roots of which enable them to hide and elude the bear which passed close by, blinded by rage and pain.

On another occasion a citizen who once owned the lands on which Renovo now stands was attacked by a large buck and would have been killed by the thrusts of the buck's antlers but for their being so wide between the beams as to admit his body between the prongs. The man held fast to the beams



keeping the prongs from his body until he was rescued by the timely arrival of another hunter who killed the buck to save him from certain death.

Another incident of a similar character occurred not far above where the North Point depot now stands. The dogs had closed in upon a buck but were unable to master the deer. A workman on the farm undertook to assist the dogs, only to receive such a thrust from the buck that his hand was disabled for several weeks.

On another occasion a bear of almost fabulous size was seen to attack and kill a very large cow and when one of the watchers attempted to drive the bruin away, the bear made an attempt to attack the man, failing only because the human was faster afoot. Another incident is also reported from Clinton County in which a large bear took a fat hog from the pigpen of an early settler.



I responded to a farmer's report of a deer damage complaint during January in Barry Township. A farmer reported as high as twenty deer feeding on his winter wheat.

In January too, I found four deer killed by vehicles along the highways of my district.—Game Protector John Spencer, Orwigsburg.

During March Hugh Andrews, a rural mail carrier, Millerton, spied a gray fox along the road near Jobs Corners. Friend fox appeared to be in an emaciated condition and Andrews was nearly able to kill it with a shovel.

Having returned to Millerton, he told his experience to Robert Gaige, a local fox hunter. Gaige and his son, Roger, took their dog to the spot described and released him. After a short time the dog was able to follow a trail to a nearby hole.

The hole was large enough for the dog to enter and they could soon hear sounds of a fight coming from the den. Shortly afterwards the dog dragged a live raccoon from the hole. While they were busy releasing the coon from the dog, a fox ran from the hole and the men were lucky enough to shoot and kill it. This fox was gray and from its poor condition it was judged to be the same one previously seen by Mr. Andrews.

No doubt about it that there exists a housing shortage in the animal world too, forcing these two strangers to use the same den together.—Game Protector James A. Osman, Tioga.



Recently while releasing ringneck pheasants we came across a Cooper's Hawk attempting to kill a released cock bird. The hawk hit the ringneck in the back of the neck but failed to get a solid hold. Then, he flew about 25 feet away and made another attempt to kill the ringneck but was unsuccessful although he did remove a lot of feathers from the ringneck's back and neck. On both occasions, the ringneck's life was saved by a bunch of crows who were successful in driving the hawk away.—Game Protector Lewis H. Estep, Berwick.

On April 26, Farm-Game Cooperator Kolb, Chester County, appeared at my headquarters with a large cock ringneck pheasant and the following story.

"On hearing a terrible noise in my chicken coop I ran out to find this bird fighting with the chickens. No sooner had I entered the coop when he darted away but next day he returned. He fought and chased some nine week old chickens and would have killed a few had I not chased him away. Finally, we captured the mischief maker and put a band on his leg. Then with several neighbors I released him in a woods some distance from my home. About a half-hour later when I returned home our friend had returned, band on leg and everything, and was again chasing our chickens. We recaptured him and he was furious. Assisting in the capture was a six year old boy who had his hat knocked off when the bird jumped at him. The pheasant was raging. He would spread his tail and jump at the wire when people came to see him. Then, he hissed like a goose at them. Mr. Pheasant was in a fighting mood."—Farm Game Manager George Lucas, Phoenixville.

While hunting mushrooms near State Game Lands, my buddy and I came upon a large blacksnake measuring close to six feet in length. It looked very large through the stomach so we decided to kill it. Upon cutting it open we found it had eaten two small grey squirrels.—Deputy Game Warden William H. Shaffer, Hynderman.

Last month, on two different occasions, after we had released cocks, a cock bird in the same region sailed out to challenge the newcomers. We were unable to see what happened in the first instance as the terrain was a recent cut-off area, but in the second instance we saw the "native" cock pitch into the newcomer and the last we saw of them was when the "native" ran the newcomer across a grass field.

Next day, we released hens and the same thing happened, only the cock bird was a gentleman this time in both instances. In the week following, while patrolling through the last mentioned area, I saw one of the stocked cock birds sneaking down the road with a "bald head" so evidently the "native" was the "better man."—Game Protector Clyde E. Laubach, Elysburg.

A friend told me that while fishing in Canada in company with his guide, Cunningham, their attention was directed toward a low-lying ridge, over which came a wild duck flying almost directly toward them. As this duck neared them it was evident that she was carrying something. Within fifty yards of their canoe she dropped her cargo. End over end, without any attempt to use its wings, fell a very small duck. It struck the water with a resounding splash, but quickly regained its composure and swam quickly to shore. Mr. Cunningham said that on another occasion he observed the same incident. It would appear that ducks do move their broods from one body of water to another. (The chap who told me this is a christian.)

Here is another one for the books! During a recent release of ringnecks we watched the last of eight cock birds fly across a rather wide field and slowly descend toward an adjacent field. Suddenly, from a small tree growing in a hedgerow darted a sharp-shinned hawk. He hit the cock in mid air and both fell to the ground in a revolving ball of feathers. Within a few seconds, the hawk flew away and the cock strutted proudly along the fence row out of sight.—Game Protector Clarence F. Walker, Beavertown.





TRANSACTIONS OF THE COMMISSION'S MEETING, APRIL 21, 1949

ESTABLISHMENT of a new system of appointing Deputy Game Protectors, new methods of procedure in the artificial propagation and distribution of game in Pennsylvania, and many other matters vital to conservation in the Keystone State were considered by the Pennsylvania Game Commission at its meeting of April 21, 1949.

Cooperation with Soil Conservation Services and Districts

The Commission agreed to continue in force and effect a memorandum of understanding which had been entered into with the Pennsylvania Soil Conservation Commission in 1947 after the Act of May 15, 1945, P. L. 547, known as the Pennsylvania Soil Conservation Law, was adopted.

Special Fox Hunting Petitions

Having reviewed properly filed petitions, the Commission approved the closure of the following counties to hunting of foxes with dogs from May 2 to June 30, 1949, both dates inclusive: Butler, Erie, Indiana, Lawrence, Perry, Susquehanna, Washington, and York.

Payment of Bounties

After a full discussion of the predator situation, the Commission agreed to continue the bounty payments currently authorized from June 1, 1949 to July 31, 1949 and from August 1, 1949 until May 31, 1950 to pay bounties on the gray fox, weasel, great-horned owl, and goshawk. A full copy of the bounty resolution is printed elsewhere in this issue.

Establishment of Dog Training Preserves

It was agreed to establish a Dog Training Preserve containing about 108 acres on lands of James E. Lower, RD 1, New Cumberland, in Fairview Township, York County. This Preserve would be known as Dog Training Preserve No. 11, York County and would be open to the public, without charge, to be used solely for training dogs during the regular training season as fixed by law or as fixed by regulations of the Commission.

Game Propagation and Distribution Procedures

The Commission approved the following recommendations of its Propagation Committee:

a. All pheasants purchased by the Commission from Pennsylvania breeders shall be picked up by Commission trucks at their propagating pens, thus providing the opportunity of inspecting the birds and resulting in paying a more reasonable price.

b. On an experimental basis this year, all hen pheasants raised on State Game Farms, or purchased from commercial breeders and cooperators in the Farm-Game Program, for distribution in Field Divisions "A" and "F," shall be held in pens constructed on State Game Lands or other public land over which the Commission can exercise control, for liberation in the spring of 1950.

c. Male pheasants for liberation throughout the State shall be held as late as possible this fall, releasing most of them a few days before the opening of the small game hunting season, and others during the season. Most of the cock birds will be released within Cooperative Farm-Game Project areas and on State Game Lands where suitable areas are available.

d. A recommendation will be made to sportsmen's organizations cooperating in the day-old chick program to hold their hen pheasants until spring of 1950, the Commission then to give them one cock bird for each ten hens held, all to be liberated under present regulations.

e. The experimental quail propagation on the Eastern Game Farm as conducted last year, and subsequent liberations, shall be continued for another year, not to exceed 10,000 quail to be raised.

f. Since procurement of rabbits for release is becoming increasingly difficult and uncertain, the Commission's personnel will make special efforts to plant more food and cover on State Game Lands with the hope that the rabbit program in the winter of 1949-50 will be more successful.

g. Purchase of 25,250 mature ringneck pheasants for liberation in the spring of 1950 was approved.

h. Purchase of 38,500 twelve-week-old ringneck pheasants from Pennsylvania breeders for delivery this fall also was approved.

New Policy for Appointment of Deputies

The Commission approved the following procedure for the selection, appointment and use of Deputy Game Protectors:

Specific Requirements

(1) *Minimum Age & Citizenship*—Not less than twenty-one (21) years of age at the time of filing application, and must be a citizen of the United States.

(2) *Residence*—Persons desiring appointment as Deputy Game Protector will be given consideration for appointment only in the district in which they reside.

(3) *Character*—All applicants shall be required to successfully undergo a rigid moral character investigation.

Applications

(1) Applications for appointment as Deputy Game Protectors shall be made on forms provided for that purpose, which may be secured from the Game Protector in charge of the district in which the applicant resides. It is preferable that the information be either typed or printed, excepting signature.

(2) All information required must be full and complete.

(3) Applications, when completed, shall be mailed to the Game Protector in charge of the district in which the applicant resides, whose name and address are shown on the reverse side of the application.

Examinations

(1) Field Division Supervisors or their designated agent will conduct examinations for Deputy Game Protectors between January 1 and August 31 inclusive, notifying the eligible applicants of the time and place of examination two weeks in advance.

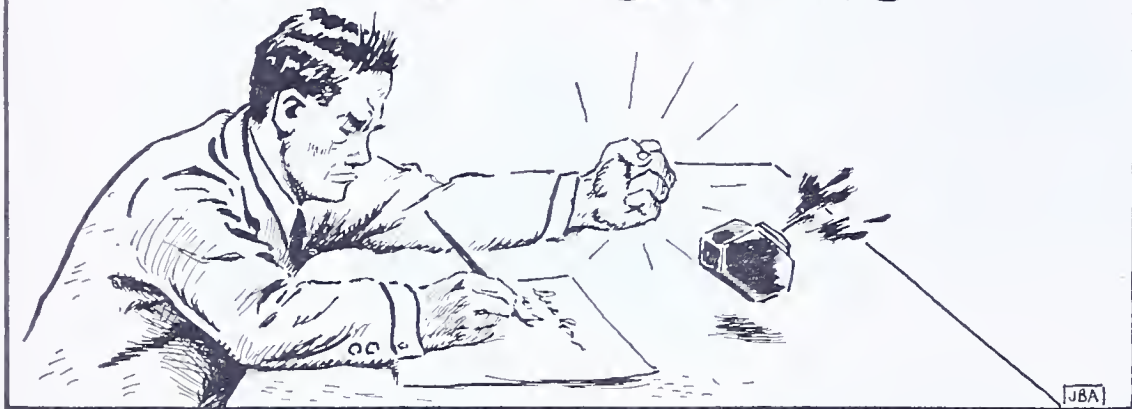
(2) All persons taking the written examination for the position of Deputy Game Protector shall be required to attain an average rating of not less than 70% before appointment will be approved.

(3) Any person who shall fail to successfully attain the required average rating of 70% must wait twelve (12) months before becoming eligible to retake an examination.

(4) The written examination shall consist of arithmetic, nature study and various provisions of the Pennsylvania Game and Fish Laws. Present examination questions shall be revised as per suggestions from the seven Field Division Supervisors and the Harrisburg staff.

(Continued on Page 24)

PEN NOTES



Fairhill,
Bryn Mawr, Pa.
March 26, 1949.

Commissioner Nicholas Biddle
Bethayres, Pa.
Dear Mr. Biddle:

After the regular shooting season is closed in Pennsylvania I have shot on a good many preserves in New Jersey and other nearby States, but in recent years have shot on only one in Pennsylvania, and that was on the Harris and Stipe grounds east of Gettysburg. As far as I know, the Harris and Stipe grounds are the only ones in Pennsylvania within motoring distance of Philadelphia.

There is an underlying feeling that all shooting should be free, and we would all like to see as much free shooting as possible; but for many reasons, some of which are indicated below, this becomes more and more difficult to supply. The argument that preserves further decrease the available areas for free shooting is sometimes valid, but this is by no means always the case. Many preserves would be posted in any event, and others would be barren of game. There is still plenty of land available for both types of shooting. In my opinion the value of the preserve to the general public far out-balances such an argument. It is largely a matter of education.

Preserves, whether public or private, are one of the best and surest means of providing liberal stocking of pheasants to the adjacent neighborhood. Furthermore, they cost the Game Commission nothing, and improve the free shooting. There is a feeling among some conservationists that improvement of environment is more important than stocking. Both are important. In some areas one, and in another area the other is most needed. As everyone knows, all the pheasants in this country originated from stocking. From the standpoint of value as a focus for stocking, preserves are useless unless they are situated in an area in which pheasants can thrive.

Last year Harris and Stipe killed 50% of birds liberated. The Twenty-fifth Biennial Report of the Connecticut State Board of Fisheries and Game showed an escape of 52.6% of birds liberated on preserves operated under State regulations. On a large acreage near Lancaster, 500 pheasants were liberated. The escape was 62%. Numerous figures could be cited, some showing higher and some a lower proportion of es-

caping birds. The proportion escaping varies according to the extent of the preserve, type of terrain, available pheasant food, skill and persistence of the shooters, ability of dogs, duration of the shooting season, number and quality of birds liberated, and other factors. At all events, the escape ratio is likely to be relatively high. The longer the season permitted for shooting, the more birds which will be put down and the more which will escape. Preserve owners endeavor to put down strong, healthy birds, hence escaping birds are of good quality for stocking.

Preserves tend to relieve shooting pressure from areas in which free shooting is permitted. This is badly needed. Every year shooting pressure increases. The U. S. Fish and Wildlife Series (1947) Report states that there were 12.9 hunters per square mile in Pennsylvania. This is based upon total acreage, whereas actually vast tracts are unsuitable for game, or, for one reason or another, are not shot, and hence concentrations are greater than the figures would indicate.

Regulated Shooting Grounds are wanted by many sportsmen. The fact that so many have sprung up in New Jersey, New York, Connecticut and elsewhere would seem to substantiate this statement. Practically all are prospering. Even with a season of five months the proprietors of these preserves have a short season, and in Pennsylvania they are further handicapped. Few manufacturers could survive if their selling season was limited to two months, even if the law did not require them to give away a large proportion of the goods which they manufactured. Next season Harris and Stipe are planning to permit 20 guns per day on their 500 acres. Last year they had more business than they could accommodate. They expect, and probably will have, even more this year. Safety and profits would seem to be better served by a longer season. If the proprietors of Regulated Shooting Grounds cannot make a worthwhile profit they will cease to operate, and a source of free stocking will be lost. An open season during October would very definitely provide improved free shooting in November, and late winter shooting a good stock for spring breeding. Escaping hens would at all times add to the breeding stock. The manager of a preserve in Connecticut informed me that they were nearly as busy

during the winter as in the autumn and that demands for reservations were almost constantly more than they could accommodate.

Despite the whole-hearted efforts of able and efficient Game Commissioners, game is, in general, becoming scarcer every decade. The most optimistic can hardly expect much return for the few dollars charged for a shooting license, even were the costs of labor and everything else not sky-high. Nevertheless, many thoughtless gunners take an opposite viewpoint. There are, however, many men who are glad to pay a reasonable price for their shooting, just as they do for their amusements and other sports. If by so doing they improve conditions for others, it would seem a wise plan to help them in every way possible, apart from the fact that every preserve that liberates even a couple of thousand pheasants adds about 5,000 pounds of meat to the available supply. Some Regulated Grounds put down more than this number.

Preserve Shooting on recently liberated birds is definitely inferior to wild shooting. However, because of the necessarily short season, small daily and seasonal limits, scarcity of game, it is often this or nothing. Many men would like to see preserve shooting fostered, and it appears to be one of the best long-range plans to provide a much needed requirement and at the same time improve free shooting. I have even heard it suggested that the Pennsylvania Game Commission should themselves establish a series of pay-as-you-go preserves. A good deal could be said both pro and con for such a plan. As it is today, many Pennsylvanians are forced to go to another state if they want a day's shooting on preserves.

Sincerely yours,
DR. CHARLES C. NORRIS.

Broad St. Station Bldg.
Philadelphia 3, Pa.
30th March, 1949

Dr. Charles C. Norris
Fairhill
Bryn Mawr, Pa.
Dear Dr. Norris:

It was a pleasure to read your excellent letter of March 26th on Regulated Shooting Grounds.

You might be interested to know that the percentage of birds killed on the one-hundred acres of Regulated Shooting Grounds which I maintain around my residence at Bethayres, for 1948, was less than on the smaller areas you sited in your letter. The number of birds liberated last fall was 140, killed 60, percentage killed 43%, and percentage escaped 57%.

The general public must be educated to most new programs, and it is one of the jobs of the Game Commission to supply such education and to put the programs across with the Pennsylvania Federation of Sportsmen, the Legislature, and the people at large.

I feel certain that in due course we shall further improve the law for Regulated Shooting Grounds which was passed in 1937.

Sincerely yours,
NICHOLAS BIDDLE
Commissioner

THE BROAD-WINGED HAWK AND THE ROUGH-LEGGED HAWK IN PENNSYLVANIA

By ROBERT D. McDOWELL

THE Broad-winged Hawk and the Rough-legged Hawk are protected species in Pennsylvania. That these birds should be given protection by law is well proven by the facts presented in Figures 2 and 3, below.

The stomach contents of 63 specimens were analyzed by Sutton, Luttringer, Langenbach, Latham, and the writer during the period from 1924 until 1947. Each individual of each prey species is recorded (except insects).

The counties in which 51 Broad-winged Hawks and 10 Rough-legged Hawks were collected during the same period is shown in Figure 1.

FIGURE 1

Distribution Record of 51 Broad-winged Hawks			
County	Number	County	Number
Cambria	1	Berks	1
Centre	7	Fulton	27
Chester	2	Huntingdon	1
Clearfield	1	Juniata	1
Crawford	1	Lancaster	2
Bedford	3	Montour	1
Bradford	1	Susquehanna ...	1

Distribution Record of 10 Rough-legged Hawks			
County	Number	County	Number
Butler	1	Mercer	1
Franklin	1	Pike	1
Lancaster	1	Susquehanna ...	1
Lawrence	1	Union	1
Lehigh	1	Venango	1

FIGURE 2

Diet Chart of 55 Broad-winged Hawks		
Food	Occurrence	Percentage
Insects	39	53.42
Mice	11	15.07
Shrews	5	6.85
Snakes	5	6.85
Unidentified Mammals	4	5.48
Unidentified Birds	3	4.11
Cottontail Rabbit	1	1.37
Chipmunk	1	1.37
Ruffed Grouse	1	1.37
Lizard	1	1.37
Frog	1	1.37
Crayfish	1	1.37
Total	73	100.00

FIGURE 3

Diet Chart of 8 Rough-legged Hawks		
Food	Occurrence	Percentage
Mice	14	93.33
Chicken (carrion)	1	6.66
Total	15	99.99



Hal Harrison Photo

Broad-winged Hawks are "mouse hawks," valuable assets to any farm.

GREATEST OF THEM ALL—from Page 9

The same thing happened to Wib Hugus' fine young dog, Flashlight's Big Ben. Ben's race was of championship caliber, too. There was no sneaking around or pussy-footing on ground scent for this fast traveling youngster and he hit a bird crouched under an old fallen log in pole timber, too. Cover of this type is, as a rule, not productive of birds. However, Ben had his bird pinned right ahead of his nose. Alas, the bird flushed right in Ben's face and the youngster took two jumps before stopping upon command. Again the damage was done, and he, too, will have to wait until next fall for another opportunity.

Then there was Jay Rod, the dark ticked

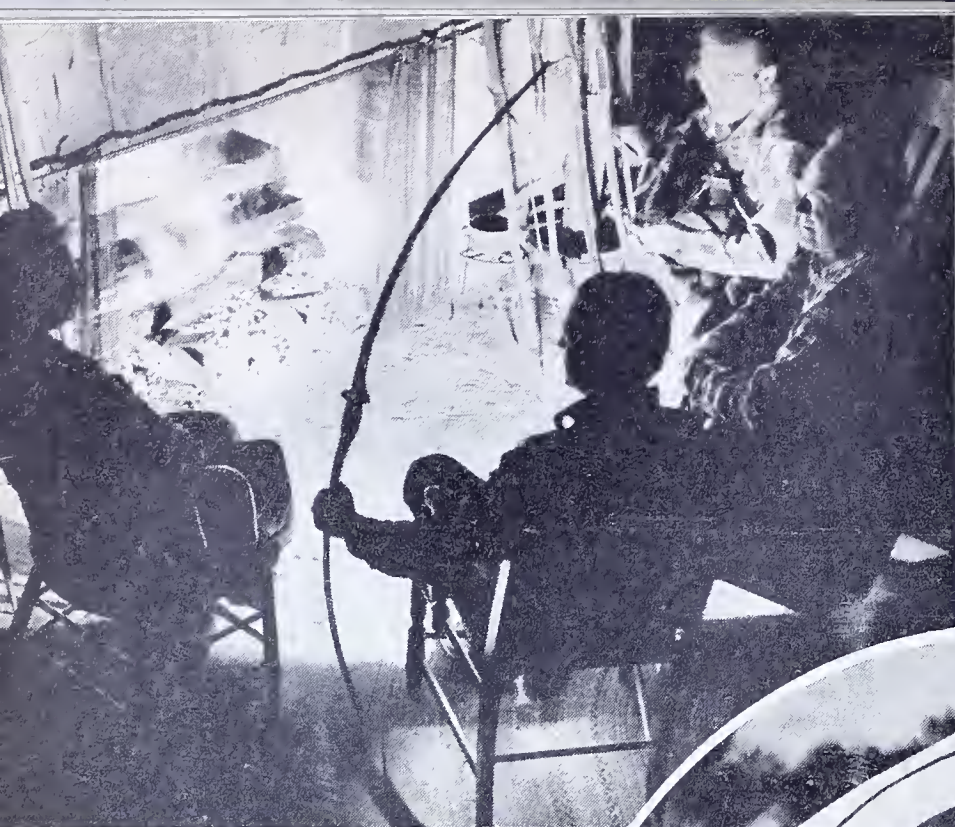
setter stylist owned by Sam Mannerino, New Kensington, and handled by Bill McCracken. Jay's qualifying hour was all that could be expected. He was wide, covered all the country before him, and maintained his pace throughout his heat. Among boulders and briars, Jay found two feeding grouse in green sweet ferns. It took McCracken at least several minutes to locate his dog among the briars and stones. Without one word of caution, McCracken flushed the two birds, took the shot, and Jay merely cocked his ears a little. However, during his final two hours, Jay, being over eight years of age, tired and failed to maintain the pace required of a champion. He finally pointed unproductively

to eliminate himself from consideration. The championship was run over the celebrated Grouse Trial Refuges near Marienville. Here the Pennsylvania Grouse Trial Clubs, with the cooperation of the Game Commission, have laid out 24 hour-long courses on the Allegheny National Forest. The trails are blazed, well painted, brushed out for horses; creeks and swamps are bridged and a wire is placed around 3,000 acres. Big game hunting is encouraged on these trial grounds, but small game hunting is prohibited. Improvement cuttings, food plantings, cover cuttings and planting of food and cover plants are all in progress at the present time. It is an honest effort to try to maintain the present grouse population and increase it if possible by systematic management.

Robin Hoods

A Photo-Story

Pennsylvania archers fill
aim for more sport, less n
grows in the Keystone State



Above: Archers gather around a crackling fire in the Norman Gibson cabin in Forest County to tell stories of the day afield with bow and arrow.

Right: Pittsburgh's 1948 woman's champion archer, Mrs. Fay Steinbart.



Above: Bill MacMillen, an Erie County Archery Preserve. Only archers may use the 1,000-acre tract set aside for the sport.
Below: Pittsburgh Archery Club members at North Park.



Above: Katy Bohlander helps her husband, Paul, by crestring arrows in their basement workshop in Aliquippa.

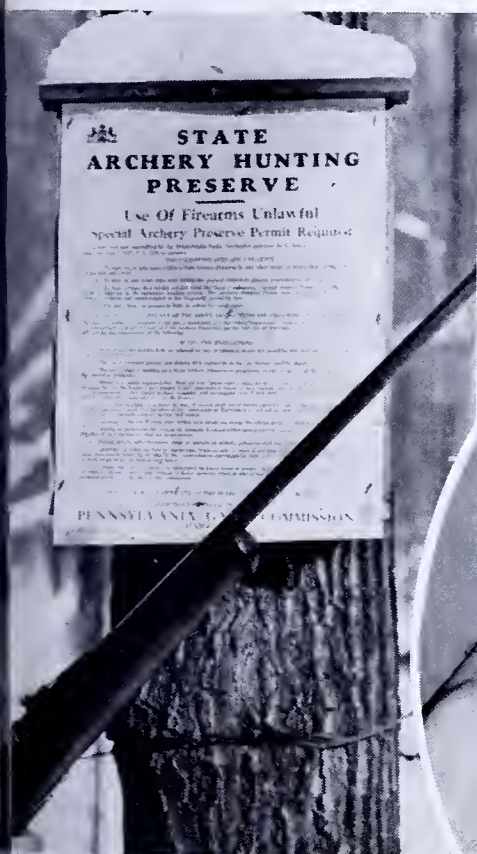
Right: Norman Gibson, Erie Archery Club, and Art Wilson, Shanango Valley Archery Club, sharpen broadheads in the Gibson cabin after a day's hunt in the Forest County Preserve.



Penn's Woods

by Hal Harrison

air with feathered shafts and
as bow and arrow popularity



...observes the rules at the Forest
...have first bought a special license
...them.
...up for a Sunday target shoot in



Above: Tracking deer is part of the Indian-like approach to big game hunting with a bow and arrow. Here, Bud Wiedmaier, Warren Archery Club, shows how it's done.

Left: The arrow point on the right is a "broadhead," used in hunting game; the other three are used in field and target archery.



Above: Les Braatan, founder of the Pittsburgh Archery Club, checks a broadhead at the Norman Gibson lodge in Forest County.

Left: Practicing at Al Gigler's field course in Beaver County are, left to right, Frank Martin, Ginny Bednarski, Anne Bizic, and Bill Pelkofer.





DEER RIFLE SIGHTS

By TED TRUEBLOOD

ANY discussion of sights for big game rifles is likely to be obfuscated by failure to consider them in the light of the conditions under which they are to be used, and the temperament, training and physical qualifications of the shooter—including age, because of its effect on vision. Even when we limit the discussion to one kind of game under a certain set of conditions and fail to consider the background of the hunter we are likely to go far astray.

Consider the sportsman who hunts almost exclusively with a shotgun. He has used it every fall for 30 years, and he shoots it during the off season at crows, skeet or traps. He hunts deer one week out of the year. During the instant that he has to deliver a single well-placed shot at a bounding whitetail is he going to forget the training of a lifetime? Hardly. He is going to shoot his rifle like a shot gun, and if he is handicapped by sights that slow him down and keep him from using the quick, instinctive, natural method of shooting that he has developed through years of practice, then the odds are that he will hesitate and miss.

It would be a serious mistake to insist upon such a man using a scope or even an aperture rear sight. For deer hunting in heavy cover he would be best equipped with a shallow V notch rear sight and a large gold bead in front. Such sights, if the bead were big enough, would be little different from those on his shotgun. If his rifle fit equally well—as it should—he could be counted upon to shoot with deadly accuracy on moving targets at close range.

Of course, this sight combination would not be good for long-range shooting in open country. Let this same hunter go West for antelope and he would be best equipped with an accurate bolt action rifle fitted with a scope. In this kind of shooting, however, unfamiliarity with his gun would not be such a handicap. Ordinarily riflemen in open country shoot at much longer range, and they have a chance to use a sitting or prone position. Here our woods hunter would have time to aim and squeeze, and the fact that it would take him considerably longer to find his target through the scope would make no difference.

The shallow V notch and large bead front sight are not an accurate combination, as accuracy is defined by the benchrest shooters—or even the average chuck hunter. Our woods hunter probably would look pretty silly trying to make a two-inch group at a hundred yards with his coarse open sights. In the kind of shooting for which they are intended, however, and in the hands of the right man, these sights are accurate—much more so than the *potentially* more accurate scope or aperture rear sight.

Consider that the target is a bounding deer somewhere between 25 and 75 yards away, dodging among trees and laurel, poorly lighted and erratic in movement. The areas in which a single shot will bring him down are a four-inch-wide line extending

(Continued on Page 21)

GUN DOG HANDLING

By HERBERT KENDRICK

IT IS NOT too early to begin thinking about the hunting season, only a few months ahead, because of the preparation made now will greatly improve your sport. While you cannot run your dog in the field on game at this time of year, why not give yourself a liberal education on handling your dog. He cannot perform in a superlative manner without the cooperation and harmonious spirit of his master.

A man must love, know, and understand his dog, and the dog must love and know his master, for without this understanding bond each hunt is but a mechanical process, and the genuine thrill of gunning is never experienced. A dog is a friendly creature by nature and his big loving heart thrives on intimacy and companionship with his master. He is an unusual animal asking very little from life, and his art of forgiveness is second only to his deep sincere devotion.

When the dog is certain of his master's affection and understanding his desire is to accomplish the tasks placed before him, and regardless of his great love for hunting, he will hunt for his master long after he is too tired to hunt for himself. The hunter plays a far more important part in hunting game birds than that of actually killing.

Before another season opens prepare yourself as well as your dog for those glorious and thrilling days. Take plenty of exercise so that you both will be tough as leather and hardy enough to cover a vast amount of territory each day. Encourage him to run merrily, and allow him to go to his birds without hacking or loud commands. Let him know you trust him to do the job he was born and bred to do. Give him freedom to develop independence and judgment in finding his game. One of the most fascinating phases of hunting is to watch a good dog exercise keen initiative in his plans and methods of search.

Never "over handle" your dog by keeping him too close to you. No dog can concentrate his mind and effort on finding game if he is constantly diverted by a restless handler. He must be allowed to use his head and his feet in seeking cover that his experience and instinct tells him is good.

Keep your dog hunting well ahead and on both sides of you. Never allow him to hunt behind. Backcasting is a definite fault and should be corrected before a season opens. It is a simple matter to teach him to swing to a motion of your arm. Wave your arm to the right if you want him to investigate the territory in that direction, and use the other arm for the opposite way. If he does not respond to the arm motion, make a few quick steps in the desired direction, and if he still fails to understand then start to run, and the chances are good that he will think something important lies in that locality and thus move quickly that way.

Do not become alarmed when your dog is out of sight. Keep your eyes open and if he does not appear in a reasonable length of time, go to the place you last saw him and hunt for him.

(Continued on Page 32)



In Memoriam



Frank F. Crosby
1884—1949

Frank Crosby, long a faithful servant of conservation in the Keystone State, died while on a trip through Ohio on May 7. He retired from active service as Game Protector with the Game Commission on June 15, 1948 after 22 years of continuous duty.

Wildlife Pendulum on Upswing

Reports from over the nation indicate that small-game populations in most sections are on the upswing of their periodic cycles, according to the Wildlife Management Institute.

The U. S. Fish and Wildlife Service's annual winter inventory disclosed substantial increases of waterfowl in all four flyways. Nearly all waterfowl species except mergansers and shovellers increased in numbers. A mild winter throughout its wintering range favored the woodcock, which made a strong comeback last season over the previous two years. The still mysterious regular cycle of the ruffed grouse turned the bottom corner two years ago and populations now appear to be building up in the Northeast toward another "high." The mild open winter which the East enjoyed this year favored the bobwhite throughout most of its range.

The harder pheasant survived the severe western blizzards better than most expected, according to reports from the Plains States.

Provided the nesting season is favorable there is little reason to believe that the climb from the crash decline of two years ago will be more than momentarily and locally checked.

Costley Appointed Supervisor for Allegheny National Forest

Richard J. Costley will be appointed as the new Supervisor for the Allegheny National Forest in northwestern Pennsylvania.

Mr. Costley will succeed Forest Supervisor Alfred H. Anderson, who is transferring to a similar position on the Monongahela National Forest in West Virginia. The transfer will take place July 1.

Both the Allegheny and the Monongahela National Forests are primarily watershed protection areas, affecting various drainages including the headwaters of the Allegheny and Monongahela Rivers which join at Pittsburgh to form the Ohio River.

The transfer of Supervisor Anderson returns him to Elkins, W. Va., where he served some years ago as Assistant Supervisor. He will succeed Supervisor Arthur H. Wood, under whom he formerly served, and who is now retiring after more than thirty-six years with the U. S. Forest Service. Anderson is a graduate of the Penn State Forestry School.

Selection of Supervisor Costley to administer the Allegheny National Forest emphasizes the importance of the game and fish management work on that forest. The Allegheny forest embraces some 467,000 acres of federally owned land in Forest, McKean, Elk and Warren counties considered to be among the best hunting and fishing areas in the State. Appointment of Costley, who has done special work in these fields, will be of interest to the many sportsmen in Pennsylvania and nearby states.

Costley is a native of Idaho, trained in forestry at Utah State College and the University of Illinois. Prior to the war he had extensive experience in forest administration in the West. He served with the armed forces and on his return was assigned as Assistant Chief in the Wildlife Management Division of the Forest Service in Washington. He has made special studies of wildlife in connection with eastern national forest administration and is well qualified to carry on the existing agreeable relations with sportsmen and state wildlife officials.



The transfer of the deed to 14,000 acres of the Tobyhanna Military Reservation from the War Assets Administration to the Game Commission was witnessed by these Commission employees on May 12. Left to right: Dot Sheesley, Secretary to the Director of the Administration Bureau; W. Gard Conklin, Bureau Director who accepted the deed on behalf of the Commission; E. Bruce Taylor, Title Officer; John Slautterback, Land Agent; Mr. Francis S. Trout, WAA regional representative; and Esther Gill, Secretary to the Executive Director.

NOTICE ON BOUNTY RATES

(Excerpt from Official Minutes of April 21, 1949)

RESOLUTIONS

WHEREAS, Reports indicate that the population of some species of predators is considerably lower than it was several years ago, and it is now believed that greater damage is being done by great-horned owls and goshawks than has been recognized previously. Therefore, further incentives are deemed necessary to bring certain species under control; and

WHEREAS, The Predator Control Committee of the Commission has given the matter study and recommends that the present bounty rates be continued to and including July 31, 1949, that from August 1, 1949, until May 31, 1950, there shall be no bounty on red foxes, and that for the last mentioned period the rates on great-horned owls and goshawks, and their fledglings, shall be increased, as hereinafter specified; and

WHEREAS, The Commission is of the opinion that it is desirable to adopt the recommendations of its committee;

THEREFORE, BE IT RESOLVED, That the Pennsylvania Game Commission, acting under the power and authority vested in it by the provisions of Article XI, Section 1101, of the Game Law, by resolutions adopted this twenty-first day of April, 1949, hereby continues from June 1, 1949, to July 31, 1949, both dates inclusive, the bounty payments currently authorized, and from August 1, 1949, until May 31, 1950, both dates inclusive, the bounty rates hereinafter specified, for the birds and animals enumerated below, if killed in a wild state in any county of the Commonwealth during the periods specified and presented in the manner and under the conditions stipulated in the Act aforesaid, except that no bounty shall be paid for either gray or red foxes killed in the counties of Chester and Delaware (where a special Act of the General Assembly restricts the killing of foxes to the protection of personal property), the rates of payment to be as follows:

BOUNTIES FOR PERIOD FROM JUNE 1, 1949, TO AND INCLUDING JULY 31, 1949.

1. *Gray Fox*—\$4.00 for each gray fox, except as indicated.
2. *Red Fox*—\$4.00 for each red fox, except as indicated.

3. *Weasel*—\$1.00 for each weasel.
4. *Great-horned Owl*—\$4.00 for each adult great-horned owl, and \$2.00 for fledgling which has not left the nest.
5. *Goshawk*—\$2.00 for each adult goshawk, and \$1.00 for fledgling which has not left the nest.

BOUNTIES FOR PERIOD FROM AUGUST 1, 1949, TO AND INCLUDING MAY 31, 1950.

1. *Gray Fox*—\$4.00 for each gray fox, except as indicated.
2. *Red Fox*—None.
3. *Weasel*—\$1.00 for each weasel.
4. *Great-horned Owl*—\$5.00 for each adult great-horned owl, and \$2.50 for fledgling which has not left the nest.
5. *Goshawk*—\$5.00 for each adult goshawk, and \$2.50 for fledgling which has not left the nest.

BE IT FURTHER RESOLVED, That if and when by act of assembly, decision of the Court, or opinion of the Department of Justice, it shall be held lawful to kill foxes in Chester County and/or Delaware County for bounty purposes, that the bounty payable therefor shall be as herein provided; and

BE IT FURTHER RESOLVED, That the foregoing resolutions shall be duly published in accordance with Section 1102 of Article XI of the Act aforesaid in the June issue of the PENNSYLVANIA GAME NEWS, also to be brought to the attention of the public by news release and other sources of public information; and

BE IT FURTHER RESOLVED, That the Executive Director is hereby authorized and directed to certify the foregoing as an act of the Pennsylvania Game Commission.

I hereby certify the above to be a full, true and correct copy of the resolutions establishing bounties on certain predators killed in a wild state within the Commonwealth from June 1, 1949, to May 31, 1950, inclusive, as adopted by the Pennsylvania Game Commission at a meeting held April 21, 1949, notice of which action is published in accordance with the requirement of law.

Thos. D. Frye,
Executive Director
Pennsylvania Game Commission

In Memoriam



Warren F. Simrell
1870—1949

Warren F. Simrell, a former official of the Pennsylvania Game Commission, passed away on April 27 at his home in Hallstead, Susquehanna County. Mr. Simrell was a Game Protector from July 1, 1915 to January 1, 1923 and Chief of the Bounty Division in Harrisburg to December 1, 1931 when he retired because of poor health.

He is survived by his wife, a son Warren, and a daughter, Mrs. Howard Achenbach who, prior to her marriage, was employed by the Game Commission. Mr. Simrell served as Postmaster at Hallstead before and after his service with the Game Commission and was active in civic and sportsmen's affairs.

North Carolina Abandons Game Farms

North Carolina has joined a growing list of states which are abandoning game farms and artificial propagation of birds for restocking in favor of habitat restoration, according to the Wildlife Management Institute.

The final break with past policy came recently when the state Wildlife Resources Commission voted to sell or lease the state game farm property between Fayetteville and Raeford. This farm has been out of operation for three years and operated on a limited scale for several previous years. In announcing the decision of the Commission, Executive Director Clyde P. Patton stated that the Commission believes that the investment of fish and game funds for wildlife restoration will accomplish more if invested in habitat development instead of in artificial propagation.

Vacation Guide Issued

For those planning a vacation, a new full-color brochure issued in connection with Park and Recreation Week, to be observed from May 21 to 30, will prove interesting and valuable, the Wildlife Management Institute believes.

Entitled "Outdoors—U. S. A.," it summarizes the recreational facilities of all national and state parks, national forests and wildlife areas, and the larger county and city parks. Copies may be had for 10 cents in stamps or coin from "Park and Recreation Week," Room 1305, 116 South Michigan Avenue, Chicago 3, Illinois.

DEER RIFLE SIGHTS—*from Page 18*

from his head back along the neck and spine and a spot the size of a luncheon plate in the front shoulder-heart area. Certainly our open sights are capable of placing every shot in either of these the hunter chooses. He has but to do his part.

Now consider another sportsman. He is not a bird hunter. His sole interest is in the rifle. During the big game season he hunts deer and bear. In late winter and spring he is a regular contender on his local target range. He hunts chucks in season, using a scope-sighted rifle, and later he uses a super-accurate .22 for squirrels and rabbits. He is, as the result of his training, a slow, careful, deliberate shot.

Should this rifleman use the same sights, even under the same conditions, as the wingshot mentioned previously? It would be foolish to insist that he do so. He is ideally suited to take full advantage of a good scope, and he undoubtedly would feel much more at home with it than he would with the open sights discussed before.

Our rifleman might not be able to get off a quick shot that would be duck soup for the shotgun-trained man—although a good scope is very fast in the hands of a man experienced in its use—but there would be ways in which the scope would make up for that. It would enable him to shoot earlier and later—and to be more sure of his hold and target—than with any iron sights. It would enable him to make out a buck half concealed by brush that never could be distinguished by the naked eye, and if he should happen to get a long shot across a clearing the scope would tell him whether it was a doe or buck and help him to make good if it was the latter.

The eyesight of the individual probably is the most important single consideration in the selection of sights. Older men, those who use glasses and those who are troubled by either near- or far-sightedness certainly should use a scope. It immediately gives them an advantage over the most hawk-eyed hunters—at least in shooting, if not in seeing game in the first place. And even here a scope will tell you whether a suspicious brown-gray object is a

buck or a stump under light conditions when nobody could be certain with the naked eye.

How about the man, however, who wants something capable of more accuracy than is possible with open sights and still can't see putting \$60 or more into a good scope and mount? His answer is found in an aperture (peep) sight. There are several reasons why a peep sight is more accurate than any open sights.

First, consider that when you aim at an object using open sights your eye is called upon to focus at three different distances at the same time. It must see the rear sight 16 inches away, the front sight 35 inches away, and the target at 100 yards. Very good, young eyes, in bright light may be able to do this. Older eyes certainly can't do it under unfavorable light conditions. The eye shifts rapidly from one distance to another and it simply can't get both sights sharp at the same time.

With the aperture sight, however, the eye has only the front sight and target to bring into focus. This is possible because of the distance of the front sight from the eye. The rear sight is not seen at all. You look through it, not at it. After a little practice, the eye automatically centers the rear aperture because the center is the brightest part.

In addition to the difficulty of seeing open sights, errors in aim are caused by reflection off the front sight and one side or the other of the rear notch—depending on which direction the light is coming from. The glare on one side of the sights makes them appear to be farther in that direction than they actually are.

Anybody can check this by shooting two groups with open sights at right angles to the sun. Shoot with the light coming from the left first and then turn around and shoot in the opposite direction with the sun on your right. Hold just the same both times. You probably will be surprised.

An aperture rear sight decreases this error because it eliminates glare on the rear sight. With a well-smoked or hooded front sight, holding off due to glare is virtually non-existent.

Many hunters contend that the peep sight is much slower than an open rear sight. Possibly it is to a man not trained in its

use and who insists on using a large disc with a small aperture. If a small disc with a large hole is used, or better, no disc at all for woods hunting, however, the peep sight is plenty fast. In addition, even with the aperture disc removed, it is more accurate and can be used somewhat earlier and later than an open rear sight.

Fine sights, which appear at first thought to be more accurate, are a mistake for anyone except the man with exceptional eyesight. Even for him they blank out sooner when the light begins to fade.

I equipped my first 30-06 with a good receiver sight and a 1/16-inch gold-bead front sight. My shooting was far from good under hunting conditions, although the combination certainly was accurate enough when I targeted it.

After a couple of seasons of poor shooting, I substituted a 3/32-inch black post for the bead front sight. A great improvement was immediately apparent. The thick blade front sight stuck up like a fence post and literally forced me to hold right.

A bold black front sight, incidentally, shows up about as well under all the light conditions one encounters in hunting—from snow to deep shade—as any other. Personally, I like it the best.

So, you see, there are a lot of things to consider when we talk about sights. The game, the conditions under which it is hunted, the man, his eyes and his training all enter into their selection. Every hunter should have the best, but what would be best for me might not necessarily be best for you.

COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA GAME COMMISSION	
Summary of Beavers trapped in twenty-four counties of Pennsylvania during the open season from February 15, 1949 to March 1, 1949.	
County	No. Beavers
Bradford	93
Cameron	17
Centre	38
Clearfield	140
Clinton	42
Columbia	4
Cumberland	11
Franklin	1
Fulton	9
Jefferson	18
Lackawanna	4
Luzerne	145
Lycoming	45
Monroe	59
Montgomery	1
Pike	96
Perry	1
Schuylkill	5
Sullivan	75
Susquehanna	54
Tioga	97
Union	2
Wayne	221
Wyoming	29
Total	1,207

EX-VACATIONISTS

By Carsten Ahrens



Said Fisherman Lees:
"I'll smoke where I please!
Lady Nic is one gal I adore
Suppose on dry days,
I do start a blaze . . .
Isn't that what the rangers are for?"

He smoked as he strode
Up a curving park road,
And an odor grew stronger and stranger;
From all sections it came,
And encircled by flame.
He didn't have time to call "Ranger!"

SPORTSMEN MUST HELP—from Page 3

buying an automobile, that produced rent chiseling and black market steaks, brought a breakdown in game law observance. When the housewife stood in line an hour with a ration coupon good for three lamb chops—if there were any left—she came home and told her spouse to bring back some wild meat on his next hunting trip. A few million sportsmen became pothunters almost overnight. The recreational side of the sport played second fiddle to the deep-freeze locker.

How many of us are violators? Out of an average hundred hunters and fishermen, how many rate as good sportsmen? How many are scoff-laws?

Oscar Johnson, who for many years was director of game for South Dakota, and Regional Director for the Fish and Wildlife Service in Minneapolis, says, "I've always felt that 95% of the people could be relied upon to play the game square." The most pessimistic officer I ever met gave good hunters only a 60-40 break over the bad ones. The figures 70-30 have been used, also, but mostly its something like 90 to 95 out of 100 who rate as good Joes.

When I was executive officer of the Alaska Game Commission several years ago I wrote down swiftly the names of a hundred anglers and gunners as they came to mind. Then I asked four or five of the field men to help me separate the wheat from the chaff. We came up with figures of 82 out of the 100 who could be trusted, 15 who could be tempted, and 3 who were out to beat the regulations.

It seems to make some difference what kind of game is being hunted, and where. Shooting hen pheasants is one of the regulations most apt to be disregarded. Is this a matter of poor eyesight, plain excitement, or the lingering feeling that these gaudy exotics are interlopers among the native grouse? Your answer is as good as the next fellow's. Duck regulations take a bad beating every fall. Again, why? Is it because most of the species are here today, gone tomorrow, and the gunner thinks he must blast down all he can as the flocks pass? The habit of deer to stand by the roadside at night, their big eyes shining like a pair of stars under the rays of any sort of electric flashlight, seems to bring out the worst qualities in a lot of men. Some fellows will risk otherwise carefully guarded reputations to knock down a goose. Trout will do it to certain anglers.

You can't put your finger on any one group of citizens and say, "That's where the trouble lies." The local lad with his wirewrapped single shot, the lush-living gent with his nine hundred dollar engraved firearm with the double action flapdoodles, the cane pole and bobber fisherman, the expert with his fairy fly wand—all have accounted for a parcel of illegal game and fish. The better the gear the better the man does not always stand up, as plenty of court records bear mute witness.

Is there no cure except to double and triple the size of law enforcement groups? Right now it is doubtful if there is a State in the country that thinks it has enough patrolmen

to cope with the present situation, and every one of them knows what it is talking about. But along with strengthening the arm of the law, administrators are searching for new ways to tell the outdoor public what violations are costing them. The more they have to put up for enforcement, the less their limited budgets allow for conservation efforts like habitat improvement, research into new methods and techniques, disease control, emergency feeding, restocking, and hosts of other chores that fit into the complicated jigsaw pattern of wildlife management. Violations definitely are retarding the programs—sapping the strength of State and Federal organizations charged with carrying them out.

No wonder that game chiefs urge license holders to follow the golden rule. No wonder they stress the greater value of just being out of doors and ask us not to measure the success of a trip afield by the amount of game slung over our shoulders, the number of fish in the creel. No wonder they are telling us very frankly that under present conditions they are unable to keep up with demands.

They urge a new concept in outdoor sportsmanship—an appreciation of the outdoors itself, the beauty and vigor of open spaces and clean air. The thrilling sight of waterfowl streaming south against the clouds, even though they may be beyond the reach of the gun, is nevertheless soul-stirring. So is a great, speckled trout that will not this day be tempted by any lure. So also is a wild turkey gobbler protected for the time being in a woodland where its ancestors were all but shot into oblivion. If we seek only meat, they will tell us; if we see only pot vittles when wild game crosses our trail, be fair to other sportsmen. Go down to the corner market. We'll save money. We'll save the wild life for those who have a finer appreciation of it.

"What I'm trying to say," said one game director recently, "is that the game hog—the lawless minority among licensed hunters and anglers—is making it tough on all the rest. He is running up a bill that all good sportsmen have to pay for. He's the one we have in mind when we write what look like nuisance regulations. He's the jasper always throwing monkey wrenches into what could be a smoothly running program for better hunting and fishing. He's the predatory human that forces us to spend altogether too much of our allotted funds for straight police work."

"Make no mistake about it, he's the fellow," summed up the game director, "and the sooner the real sportsmen pitch in to help us bring his kind before the judge, the sooner we can deliver more fish and game."

Behind the black ball? We're blind as a mole if we don't see it. We're doing somewhat less than our share if we don't take a lesson from that little gun club where they gave big Jake the heave-ho. The letter I received a few days ago from the secretary of that valiant group is what prompted this article.

"The game warden," he wrote, "called our bluff on that letter we sent him about Jake. He showed up at our next meeting and

wanted to know did we mean business, or were we just letting off some hot air. We told him we meant every word of it. What could we do to prove it?

"I'm not saying who did what from this point on, but when the warden dared us to set a trap that couldn't possibly catch anything except a violator, the affirmative vote was unanimous. We didn't figure we were squealers or stool-pigeons. We were just a bunch of ordinary Joes who didn't figure to be robbed of our rights by a single law-breaker. We figured that bunch of pheasants he killed belonged to all of us."

"So we set a trap," wrote the gun club secretary, "and we baited it with some more cock pheasants. When the warden sprung the trap, he caught something. Mister, he caught him a polecat."

Answers to Sportsman's Quiz

1. (b)
2. (b)
3. (a)
4. (a)
5. (b)
6. (a)
7. (d)
8. (a)

Correction: The March issue of Sportsman's Quiz contained a wrong answer. The answer to the question: "Are .410 gauge slugs rated excellent for big game?" should have been FALSE, not true.



DARN DEAR ACCIDENT —
from Page 7

the ever present desire to out race time ends in a disaster.

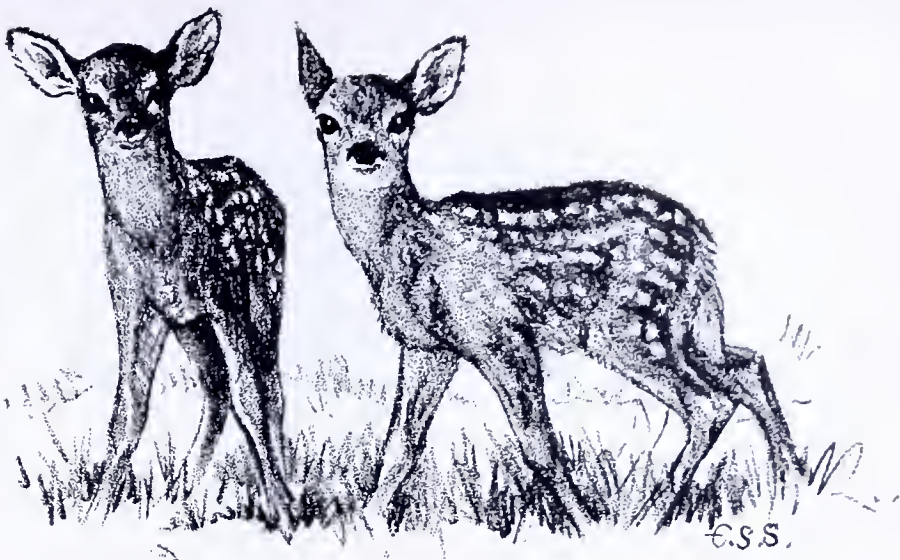
Is there a sure way of preventing these deer accidents? Deer jump up so unexpectedly and dart across the road in front of a passing motorist so quickly that seldom, if ever, is there a chance to avoid hitting them. This frequently happens not only during the night, but just as often during the day light hours and always at those times when least expected.

Often if deer jump in the middle of the road some distance ahead of the oncoming car, the driver can swerve the car to the side of the road thus avoiding it.

However, there are a few things that can be said on how to avoid these catastrophes. Keep in mind that deer harbor in certain localities. In those localities which look like deer territory, the driver should use caution when driving through. A moderate rate of speed, even though it may mean arriving 20 minutes late, is by far better than an accident. Being on the alert, watching both sides of the road as well as far in advance, can help prevent these deer accidents.

Cutting speed while driving through wooded areas not only will help avoid these costly and tragic events, but often there are rewards to the motorist by allowing them to see some rare and pretty scenery. Ordinarily these would be missed simply because the motorist is engrossed watching the speedometer registering 50 and more!

One example of being rewarded with some rare and wonderous sight as a result of cutting speed, happened on the Pocono Mountains recently. I, by chance, looked to



the extreme right and there in a small clearing among the trees stood two small fawns. Stopping the car I rolled down the car window and whistled. Instantly the fawns tilted their heads towards me in a most comical and curious manner. Whistling again, they cocked one ear up and then the other. It was all of five minutes that they amused me (or I them) before they bolted back into the woods.

Numerous other motorist wizzed passed at breath taking speed; however, I had been the only one who stopped or noticed them. Did any of the other passing car's occupants see them? I doubt it or they too would have stopped or slowed down somewhat. If they did see them, do you believe they weren't interested? I doubt that too, as few people refrain from mentioning that they had seen a deer on a trip. To the resident of the towns and cities, seeing a deer in its natural habi-

tat is not a common sight.

It can be safely said that 90% of the motorist speed by the little things that make life a little more interesting. That same percentage have the most accidents caused by a deer bounding into the road unexpectedly. This occurrence is nation-wide and is not confined to any one district. Conservation of our wildlife should not stop when the rod and gun is placed once more in the cabinet, but should be practiced in every day of living.

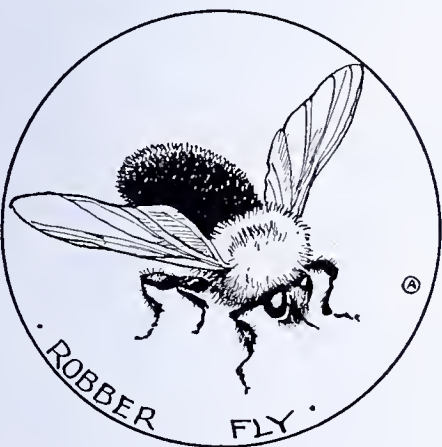
Tom and Harry were fortunate in their accident. The car was badly smashed and cost a considerable sum for repairs, but at least neither lost his life. There has been numerous occasions when this has happened. The driver and companions were killed when the car smashed broadside into a deer and the driver lost control of the speeding car. What a terrible cost to pay for not realizing the danger of speeding through deer territory!

CAMOUFLAGE IN NATURE—
from Page 5

like bees, even pretending to sting although they have no stinger.

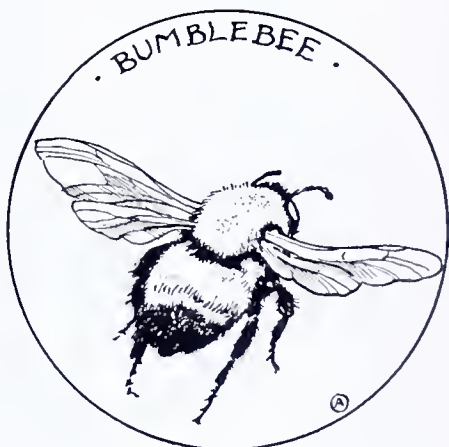
The Monarch butterfly—that big brown one you see in late summer and fall—has an acrid taste to birds and is avoided by them. The Viceroy butterfly tastes good to birds—but no bird will ever bother one because the Viceroy is almost an exact copy of the larger Monarch. And even the brilliantly-colored butterflies can be said to have protective coloration, because they are nearly invariably unpleasant to the taste of birds and other things which might prey on them. They practically scream: "Hands off! Don't touch me!" So, too, some butterflies are brightly colored on top and dull underneath, which is really protective coloration for them. When pursued by an enemy following the bright colors of the top side of the wings, these butterflies will alight suddenly and fold their wings above them, hiding all the color and exposing the drab undersides. The pursuer, suddenly losing sight of its brilliant prey, is completely puzzled.

Two of the most terrifying-looking things in the insect world are a pair of caterpillars—the Hickory Horn Devil and the caterpillar



insects that look exactly like leaves, twigs, pine needles, grass or the ground on which they live. Butterflies which taste good to birds imitate butterflies which have a vile taste. Harmless caterpillars resemble vicious serpents. Sometimes it is hard to tell exactly what you are looking at in the insect world.

The stinging bees, wasps and hornets are often imitated by other insects which can't sting at all. One harmless fly is almost an exact imitation of the big bumblebee. Clear-winged moths, which fly by day unlike other moths, have achieved considerable protection from enemies by looking like bees that sting. They not only resemble bees, but they act



of the beautiful Tiger Swallowtail butterfly, which is sometimes known as the "tomato" or "tobacco" worm. The Hickory Horn Devil is ugly enough to scare any inquisitive bird into flight, and the Swallowtail Butterfly caterpillar has two big false eyes on the back of its body so that it looks like a serpent. Both are absolutely harmless, but we'll bet you wouldn't pick up one if you didn't know anything about them!

Watching for such evidence of camouflage or imitation can make your walks outdoors more pleasant. Seeing is not always believing in the field. Remember that and try to discover some of nature's disguises when you go abroad at any time of the year.

COMMISSION MEETING TRANSACTIONS—*from Page 13*

District Quotas

(1) The Commission established quotas restricting the number of approved Deputy Game Protectors to not more than 20 for each district unless authorized approval has been received from the Director of Field Management to increase this number.

Certain Activities Restricted

(1) Deputy Game Protectors, known as Working Deputies, shall not be permitted to hold dual police authority except those specifically authorized by law.

(2) Deputy Game Protectors shall under no conditions be permitted to act as private patrolmen.

(3) Deputy Game Protectors engaging in law enforcement activities in a district other than that in which they reside, or are assigned to work, shall make known their intentions to the proper District Game Protector prior to engaging in any such activity.

Expiration of Commissions

(1) Deputy Game Protector appointments shall automatically expire at midnight, April 30, of each even numbered year; however, any such commissions may be recalled sooner, without cause being shown.

Responsibilities

(1) Persons accepting appointment as Deputy Game Protector shall be responsible for the enforcement of all of the laws pertaining to conservation, and the performance of such other services as may be specifically assigned or volunteered from time to time.

(2) Deputy Game Protectors shall not receive compensation from the Commonwealth for their time, expenses or efforts, except as may be legally authorized in advance of the performance of such services. They are, however, permitted to receive fees and costs for the performance of any official duty in the same amounts as are paid to constables.

(3) Deputy Game Protectors shall serve solely under the supervision of the Game Protector in charge of the district in which they reside, and as such, must be totally amenable to the rules and regulations for the conduct of such employees as may be imposed by the Commission and administered by the District Game Protector.

General Requirements

(1) The Pennsylvania Game Commission will not furnish any equipment in whole or part, other than stationery, books of instruction and credentials to Deputy Game Protectors.

(2) In addition to specific requirements, consideration shall be given to special qualifications of applicants, as well as to the geographical location in the county in which they reside, with regard to law enforcement problems, game feeding, farm-game project patrolling, and geographical location in relation to other Deputies, in making selections for appointments.

Opening State Game Land Roads

It was decided to permit travel by the public on roads through State Game Lands

during the months of July and August, during daylight hours only. The Field Division Supervisors will designate which roads shall be opened to the public and appropriate signs will be prepared and posted at the entrance to such roads.

Discontinuance of Exhibits

Since the value of exhibits cannot be determined and there is a question as to whether or not their cost is justified, it was decided that all exhibits be discontinued until further sanction by the Commission.

Publication of Bulletins

The Commission agreed to publish during the coming year a new bulletin on the Pymatuning and two new monograph bulletins on the whitetailed deer and wild turkey.

Broader Policy for Sale of Publications

At present the only groups and individuals who may sell subscriptions for the PENNSYLVANIA GAME NEWS, bird charts, Commission bulletins, etc., on a commission basis, are hunting license issuing agents, Boy Scouts, and other youth groups, and institutions such as the Carnegie and Scranton Museums and the Academy of Natural Sciences, Philadelphia. It was agreed that this policy be broadened to permit granting concessions to other agencies such as book stores, department stores, Senior Sportsmen's Clubs, or other reliable groups or individuals.

Time and Place of Next Meeting

It was decided to hold the next meeting of the Commission in Harrisburg on Friday, July 1, 1949.



OVER 250 YEARS OF SERVICE! These Game Commission employees pictured at a conference held at Indiantown Gap last fall each have at least 28 years of service. All were present at a similar conference held in Harrisburg in 1920. Left to right: J. J. Slautterback, Land Agent, Harrisburg; Arthur G. Logue, Supervisor, Division "D"; Wilbur M. Cramer, Chief of Training; M. E. Sherman, Supervisor, Division "E"; W. Gard. Conklin, Director, Administration Bureau; Carl B. Benson, District Game Protector, F-12; Seth Gordon, former Executive Director; Leo E. Bushman, District Game Protector, D-20; Miles L. Reeder, District Game Protector, E-17.

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of April, 1949

ADAMS—\$30.00

Guise, Roy David, R. D. 1, Aspers. Making false declaration of killing one red fox in attempt to collect bounty \$ 10.00
 McCauslin, Harold J., R. D. 2, York Springs. Making false declaration of date on killing one red fox in attempt to collect bounty Taylor, John R., R. D. 1, Aspers. Making false declaration of date of killing red fox in attempt to collect bounty 10.00

ALLEGHENY—\$1,075.00

Breen, Joseph P., 1752 Barr Ave., Crafton. Possessing loaded shotgun in vehicle standing along highway 10.00
 Lee, Ray E., 334 Thrd St., Pitcairn. Lending resident hunting license to another 20.00
 Pirl, Glenn E., R. D. 1, McKeesport. Killing splke buck in closed season 100.00
 Petrosky, John W., 1217 Louise St., Munhall. Shooting at and killing human being in mistake for game (deer) 1,000.00
 Shearn, John J., 19½ W. Crafton Ave., Crafton. Possessing loaded shotgun in vehicle standing along highway 10.00
 Shumaker, Ralph W., 1460 Watson Drive, Turtle Creek. Furnishing false date in effort to collect bounty 10.00
 Sopak, Joseph P., 223 W. 8th Ave., Tarentum. Making false claim to collect bounty 25.00

ARMSTRONG—\$30.00

Fritz, Joseph E., Oak Ridge. Furnishing false date in effort to collect bounty on one weasel 10.00
 Kenmuir, Robert S., R. D. 1, Shelocta. Trapping without a resident hunting license 20.00

BEAVER—\$20.00

McCoy, Charles W., R. D. 1, Georgetown. Hunting without resident license 20.00

BERKS—\$25.00

Wesner, Paul R., 1533 Mulberry St., Reading. Hunting on Special Dog Training Area 25.00

BLAIR—\$10.00

Snowberger, Earl M., R. D. 1, Hollidaysburg. Falsifying date of killing one weasel in attempt to collect bounty 10.00

BRADFORD—\$220.00

Bartlow, Arthur L., R. D. 3, New Albany. Removing property (commonly called Princess Pine) from State Game Lands 25.00
 Chamberlain, Duane, R. D. 1, Columbia Cross Roads. Attempting to collect bounty through fraud (on four New York weasels) 100.00
 Cragle, Ralph E., Leraysville. Attempting to defraud Commonwealth through collection of bounty 25.00
 Kennedy, Gerald F., R. D. 2, Canton. Making false declaration of date in attempt to collect bounty 10.00
 Nagle, Herbert E., R. D. 1, Ulster. Making false declaration of date in attempt to collect bounty 10.00
 Potter, Joseph K., R. D. 1, Sugar Run. Attempting to take beaver after having taken legal limit 50.00

BUCKS—\$60.00

Good, William, Furlong. Making false declaration of date in attempt to collect bounty 10.00
 Hoehne, Richard A., R. D. 1, Morrisville. Making false affidavit in attempt to collect bounty 50.00

CAMBRIA—\$175.00

Huffman, Paul R., R. D. 1, South Fork. Hunting after hunting rights had been denied; refusing to accompany officer after arrest 140.00
 Lecorchick, Stephan, Box 84, Barnesboro. Dogs chasing small game (rabbit) in closed season 10.00
 Lusick, John, South Fork. Unnaturalized foreign born resident possessing firearms 25.00

CENTRE—\$85.00

Croyle, George L., Philipsburg. Setting steel trap with jaw spread exceeding 6½ inches 10.00
 Isenberg, Edward D., Oak Hill Station. Dog chasing deer 25.00
 McCown, Richard B., Beta Theta Pi House, State College. Possessing male ringneck pheasant in closed season 25.00
 Williams, Harry M., Beta Theta Pi House, State College. Possessing male ringneck pheasant in closed season 25.00

CHESTER—\$20.00

Sarmento, Louis, 209 Chestnut St., Downingtown. Hunting woodchucks in closed season 10.00
 Shock, George E., R. D. 1, Elverson. Dog chasing small game in closed season 10.00

CLEARFIELD—\$220.00

Duttry, George, R. D., Sabula. Throwing artificial light upon deer while in possession of a rifle 100.00
 Edinger, Everett, R. D. 2, DuBois. Throwing artificial light upon deer while in possession of a rifle 100.00
 Graham, William H., R. D. 2, Clearfield. Giving false date on bounty claim 10.00

COLUMBIA—\$25.00

Byrem, Richard E., 735 Catherine St., Bloomsburg. Possessing loaded rifle in vehicle in motion on highway 25.00

DAUPHIN—\$20.00

Moss, Thomas V., 4795 Tipton Rd., Lawnton. Dog chasing game (pheasant) in closed season 10.00
 Shank, David B., 4794 Tipton Rd., Lawnton. Dog chasing game (pheasant) in closed season 10.00

FAYETTE—\$220.00

Coury, Joseph E., R. D. 3, Uniontown. Dog chasing small game in closed season 10.00
 Fowler, George E., R. D. 1, Uniontown. Killing doe deer in closed season 100.00

Hall, John K., Star Route, Uniontown. Making false declaration of date in attempt to collect bounty 10.00
 Tressler, George D., Box 292, Adah. Killing doe deer in closed season 100.00

HUNTINGDON—\$10.00

Hockenberry, Warren C., R. D., Blairs Mills. Making false declaration of date of killing one gray fox 10.00

INDIANA—\$140.00

Chronosky, Herman J., McIntyre. Dog chasing small game in closed season 10.00
 Gromley, Lee G., Glen Campbell. Making false declaration of date in attempt to collect bounty claims 20.00
 Miller, John C., R. D. 1, Cherry Tree. Killing doe deer in closed season 100.00
 Setlock, Stanley G., McIntyre. Dog chasing game in closed season 10.00

JEFFERSON—\$25.00

Mulhollan, Harry, 211 Mabel St., Reynoldsville. Possessing rifle unwrapped in vehicle between 5 p. m. and 7 a. m. 25.00

JUNIATA—\$52.00

Kauffman, Glenn A., R. D. 2, Millerstown. Fishing in State Game Refuge 25.00
 Metzger, Merrill G., R. D. 2, McAlisterville. Hunting game on Sunday 25.00
 Yohn, Robert M., Port Royal. Failure to report killing of deer within 5 days after close of season 2.00

LACKAWANNA—\$35.00

Bomersheim, Avery J., R. D. 2, Moscow. Possessing live raccoon without permit 25.00
 Scott, Peter O., Sr., R. D. 3, Moscow. Giving false date in attempt to collect bounty on one weasel 10.00

LEBANON—\$25.00

Gates, George W., 132 N. Gannon St., Lebanon. Destroying trees (or shrubs) on State Game Lands 25.00

LEHIGH—\$150.00

German, William H., R. D. 2, Slatington. Using vehicle to hunt game 50.00
 Rogers, Keith A., 1514 Catalina St., Allentown. Assisting in the taking and killing of a ringneck pheasant cock in closed season 25.00
 Snyder, Paul H., 316 Liberty St., Allentown. Depositing rubbish and garbage on State Game Lands 25.00
 Trayler, Samuel W., 1446 Hamilton St., Allentown. Using vehicle to hunt and kill game (ringneck pheasant cock) 50.00

LUZERNE—\$220.00

Brush, Gustave A., R. D. 1, Mountain Top. Giving false dates to collect bounty on two weasels 20.00
 Clark, Patrick J., 59 Cooke St., Ashley. Setting trap closer than 25 ft. from established beaver dam (Fine & costs remitted) .. 50.00
 Craig, Salvatore V., 550 Arthur St., Hazleton. Fishing in Brady's Lake in closed season 25.00
 Gubbiotti, Gelso J., R. D. 2, Wilkes-Barre. Dog chasing small game (rabbit) in closed season 10.00
 Kokinda, Joseph P., 2 Truesdale Terrace, Peely. Giving false date of killing to secure bounty 10.00
 Madrots, Frank, 64 Miner St., Hudson. Failure to report shooting accident causing injury to another 25.00
 Pappas, George R., 126 Scott St., Wilkes-Barre. Fishing in Brady's Lake in closed season 25.00
 Perna, Carmen J., 141 Franklin St., Dunmore. Possessing unloaded rifle larger than .22 long not in case in vehicle standing on highway between 5 p. m. and 7 a. m. 10.00
 Slavitsko, John L., 49 Wyoming St., Ashley. Dog chasing small game (rabbit) in closed season 10.00
 Walker, Philip C., Jr., 2641 South Main St., Wilkes-Barre. Giving false date to collect bounty on one weasel 10.00
 Young, John, R. D. 2, Wapwallopen. Attempting to defraud the Commonwealth through the collection of bounty 25.00

LYCOMING—\$20.00

Ellis, Lehman B., R. D. 2, Montgomery. Making false declaration of date of killing in attempt to collect bounty on one fox 10.00
 Riffl, Luther H., 811 Hepburn St., Williamsport. Permitting dog to chase small game in closed season 10.00

MCKEAN—\$45.00

Coast, Samuel E., Box 75, Custer City. Giving false dates on killing of two weasels in attempt to collect bounty 20.00
 Yale, Zane O., R. D. 4, Smethport. Fishing in State Game Refuge 25.00

MONTGOMERY—\$55.00

Cabot, Eugene D., 358 Grove St., Bridgeport. Attempting to kill a ringneck pheasant in closed season 25.00
 Chomnuk, Anna, 542 Jefferson Ave., Pottstown. Dog chasing small game in closed season 10.00
 Heckler, Isaac B., R. D., North Wales. Making a false declaration of date of killing in attempt to collect bounty on one fox 10.00
 Kulp, Walter M., 222 Warren St., Pottstown. Dog chasing small game in closed season 10.00

PERRY—\$35.00

Brownawell, Clark A., R. D., Landisburg. Making false declaration of date of killing one weasel in attempt to collect bounty 10.00
 Heyward, Kapp B., 225 Valley St., Marysville. Dog chasing deer 25.00

POTTER—\$27.00

Blavvelt, Richard H., 781 N. Main St., Coudersport. Making false claim in attempt to collect bounty 25.00
 Lannager, Kenneth E., 354 E. 2nd St., Coudersport. Failure to report killing of deer within 5 days after close of season 2.00

PHILADELPHIA—\$25.00

Funk, Guy A., 716 Fisher Ave., Philadelphia. Camping on State Game Lands 25.00

PIKE—\$10.00

Croft, Ward N., Greentown. Giving false date of killing to secure bounty 10.00

SCHUYLKILL—\$20.00

Fisher, Horace H., Washington St., Orwigsburg. Giving false date to collect bounty on one red fox 10.00

Snyder, John S., 609 E. Mahanoy St., Mahanoy City. Giving false date to collect bounty on one weasel 10.00

SOMERSET—\$50.00

Murray, Billie B., R. D. 1, Salisbury. Making false declaration of dates to obtain bounty on one red fox, two weasels 30.00

Silbaugh, Fred F., R. D. 3, Confluence. Dogs chasing small game in closed season 10.00

Zimmerman, Pius, R. D. 1, Meyersdale. Making false declaration of date in attempt to collect bounty 10.00

SUSQUEHANNA—\$145.00

Holgate, John B., R. D. 2, Kingsley. Making false statement to obtain bounty on one weasel 10.00

Kurosky, Paul J., R. D. 1, Montrose. Attempting to defraud the Commonwealth through the collection of bounty 25.00

Stanley, James P., R. R., Little Meadows. Giving false date in attempt to collect bounty on one red fox 10.00

Winans, Harvey, R. D., Montrose. Attempting to take deer in closed season through the use of an artificial light 100.00

TIOGA—\$95.00

Heffner, Simon A., R. D. 2, Lawrenceville. Failure to tag two traps 20.00

Parker, Llewellyn H., Liberty. Possessing beaver in closed season 50.00

Sparling, Ward, 285 S. Main St., Mansfield. Depositing trash on State Game Lands 25.00

WAYNE—\$85.00

Altemier, William L., R. D. 1, Lake Ariel. Giving false date of killing in attempt to secure bounty 10.00

Stevens, Charles J., R. D. 1, Angels. Attempting to defraud the Commonwealth through the collection of bounty on one fox .. 25.00

Warwick, Joseph E., 1235 Westside Ave., Honesdale. Setting one trap for beaver less than 25 ft. from an established beaver house 50.00

WASHINGTON—\$40.00

Daugherty, Harry C., Jr., Finleyville. Making a false declaration of date in attempt to collect bounty 10.00

Hallam, Frank R., 426 Valley St., McDonald. Dog chasing small game (rabbit) in closed season 10.00

Jackson, Russel, R. D. 3, West Finley. Making false declaration of date of killing two gray foxes in attempt to collect bounty 20.00

WESTMORELAND—\$40.00

Burnett, Clark L., Moween. Making false declaration of date of killing one gray fox in attempt to collect bounty 10.00

McIntire, Ray, Box 30 H. R. D. 2, Blairsville. Making false declaration of date of killing one weasel in attempt to collect bounty 10.00

Young, Lester E., R. D. 1, Vandergrift. Making false declaration of dates of killing in attempt to collect bounty 20.00

NON-RESIDENT—\$60.00

Hatch, Daniel E., R. D., Alpha, New Jersey. Attempting to take muskrats in closed season 10.00

Taylor, Fred., Hartford, Connecticut. Hunting without non-resident license 50.00

HUNTING LICENSE REVOCATIONS

At a recent meeting the Pennsylvania Game Commission revoked the hunting and trapping license privileges of the following named persons to the dates shown.

ADAMS

Chapman, Robert, R. D. No. 1, Ortanna. Assisting in the killing of two deer in closed season Aug. 31, 1951

Kane, Frances L., Guernsey. Possessing seven green muskrat skins in closed season Aug. 31, 1951

Kuykendoll, Earl B., Iron Springs. Killing doe deer in closed season Aug. 31, 1951

Null, Walter, R. D. No. 2, Gettysburg. Possessing parts of hen pheasant Aug. 31, 1951

Patterson, Harry, Jr. Killing two deer in closed season .. Aug. 31, 1951

Showers, Marlin J., R. D. No. 1, Aspers. Possessing deer meat from two deer in closed season Aug. 31, 1951

Swope, George D., R. D. No. 5, Gettysburg. Attempting to kill gray squirrel in closed season Aug. 31, 1950

Taylor, Donald D., Aspers. Possessing deer meat in closed season Indefinitely

Taylor, Marlin O., R. D. No. 1, Biglerville. Possessing deer meat in closed season Aug. 31, 1951

Taylor, Richard A., R. D. No. 1, Aspers. Possessing deer meat in closed season Aug. 31, 1951

Taylor, Rodney C., R. D. No. 1, Biglerville. Possessing deer meat in closed season Aug. 31, 1951

Weaver, Francis I., R. D. No. 5, Gettysburg. Attempting to kill gray squirrel in closed season Aug. 31, 1950

ALLEGHENY

Brookmiller, Lawrence J., 1249 Ridge Ave., Pittsburgh. Assisting to conceal deer unlawfully taken Aug. 31, 1951

Brunner, Charles W., 2112 Lehigh St., Swissvale. Possessing spike buck deer in closed season Aug. 31, 1951

Ciallelli, Charles, 732 Kelly St., Brushton, Pittsburgh. Possessing two rabbits taken in closed season Aug. 31, 1951

Cupec, John A., 203 Normantown Road, Glassmere. Shooting within 150 yds. of occupied building Aug. 31, 1951

Fazio, James J., 7530 Roslyn St., Swissvale. Possessing spike buck deer taken in closed season Aug. 31, 1951

Johnson, Robert, Box 22, Oakdale. Hunting within 150 yds. of occupied building Aug. 31, 1952

Maust, Harry, 128 E. 8th Ave., Homestead. Attempting to kill second deer in one season Aug. 31, 1951

Mucha, Michael J., 308 Torrence Ave., Carnegie. Using parts of a deer unlawfully killed Aug. 31, 1951

Parisi, Dominic, R. D. 3, Bellevue. Possessing and transporting deer illegally killed Aug. 31, 1951

Parisi, Julius, R. D. 3, Bellevue. Possessing and transporting deer illegally killed Aug. 31, 1951

Richardson, Raye D., 601 Amity St., Homestead. Possessing seven muskrat pelts in closed season; setting ten muskrat traps in closed season; trapping after rights had been denied Aug. 31, 1952

Saccamango, Frank, 7519 Ardmore St., Swissvale. Possessing spike buck deer in closed season Aug. 31, 1951

Saccamango, Ned, 1519 Ardmore St., Swissvale. Possessing spike buck deer in closed season Aug. 31, 1951

Seemiller, Elmer F., 122 Amada Ave., Mt. Oliver. Killing ringneck in closed season; hunting without a license .. Aug. 31, 1951

Wittler, Francis W., 532 McClintock St., Pittsburgh. Possessing deer unlawfully taken Aug. 31, 1951

ARMSTRONG

Mastarone, Idale, Box 193, Leechburg. Attempting to kill hen pheasant Aug. 31, 1951

Zanotti, Dominick M., 142 Lincoln Ave., N. Vandergrift. Throwing light upon deer while in possession of firearms Aug. 31, 1951

BEDFORD

Clites, Earl C., R. D. 1, Hyndman. Possessing parts of a deer killed in closed season Aug. 31, 1951

Karns, Walter A., Box 317, Bedford. Possessing parts of a deer killed in closed season Aug. 31, 1951

Lute, Edward D., Box 320, Bedford. Possessing parts of a deer killed in closed season Aug. 31, 1951

Lydig, Charles E., R. D. 1, Hyndman. Possessing parts of a deer killed in closed season Aug. 31, 1951

Reighard, Donald, R. D. 1, Martinsburg. Killing a ringneck pheasant hen Aug. 31, 1952

Swope, Alvie, R. D. 2, Martinsburg. Possessing parts of male deer taken in closed season Aug. 31, 1951

Westover, Warren H., Alum Bank. Using artificial light to take two rabbits; hunting rabbits on Sunday Aug. 31, 1951

BERKS

Breidegam, DeLight E., Lyons Station. Assisting to conceal deer unlawfully taken Aug. 31, 1951

Breidegam, DeLight R., Lyons Station. Possessing parts of a deer unlawfully taken and transporting parts of a deer unlawfully taken Aug. 31, 1951

Hartman, Jacob D., R. D. 2, Kutztown. Possessing ringneck pheasant hen Aug. 31, 1951

Heintzelman, Norman C., R. D. 2, Kempton. Killing doe deer in closed season Aug. 31, 1951

Himmelreich, Benjamin F., Lyons Station. Assisting to conceal deer unlawfully killed Aug. 31, 1951

Kunkel, Leroy C., R. D. 2, Kempton. Hunter damaging property Aug. 31, 1951

Mertz, Ernest R., R. D. 2, Kutztown. Attempting to kill a ringneck pheasant hen Aug. 31, 1951

Milligan, Earl S., 1326 Liggett Ave., Reading. Shooting or disturbing wildlife within 150 yds. of an occupied building Aug. 31, 1951

Norton, Allen J., R. D. 1, Wernersville. Killing ringneck pheasant hen; hunting pheasants on Sunday Aug. 31, 1951

Rinehart, Carlton H., R. D. 2, Reading. Hunting without resident license; killing ringneck pheasant hen; hunting pheasant on Sunday Aug. 31, 1951

Schmidbauer, Ludwig, 241 Linden St., Reading. Killing antlerless deer Aug. 31, 1951

Webber, Burt D., 15 Furnace Rd., Robesonia. Assisting to conceal a deer unlawfully killed; failure to maintain complete roster Aug. 31, 1951

Weidner, James, R. D. 1, Reading. Hunting on Special Dog Training Area Aug. 31, 1950

BLAIR

Burns, William M., 527 E. Wopsy Ave., Altoona. Possessing parts of doe deer killed in closed season Aug. 31, 1951

Cox, Walter R., R. D. 1, Claysburg. Using an automobile to hunt game; shooting on lands of park Aug. 31, 1951

Elvey, Fredrick L., 309 4th St., Altoona. Killing male deer not having two or more points to one antler Aug. 31, 1951

Poulllos, Peter, R. D. 2, Tyrone. Possessing deer unlawfully taken Aug. 31, 1952

Smith, Henry W., R. D. 1, New Freedom. Possessing rifle in vehicle in motion on highway, not securely wrapped between 5 p. m. and 7 a. m. Aug. 31, 1951

Woomer, Chester L., 200 E. Bell Ave., Altoona. Killing doe deer in closed season; shooting within 150 yds. of occupied school building Aug. 31, 1951

Woomer, Lester A., R. D. 2, Williamsburg. Possession of parts of a doe deer killed in closed season Aug. 31, 1951

BRADFORD

- Belles, Elwood L., 213 North St., Athens. Attempting to take beaver in closed season; setting two traps closer than 25 ft. from beaver dam Aug. 31, 1951
- Belles, George A., 213 North St., Athens. Attempting to take beaver in closed season; setting two traps closer than 25 ft. from beaver house Aug. 31, 1951
- Focht, Theodore W., 412 S. Elmer Ave., Sayre. Shooting at target more than 200 yds. from headquarters in big game season Aug. 31, 1950
- Johnson, Admiral E., R. D. 6, Towanda. Making false declaration of dates on foxes killed for bounty Aug. 31, 1952
- Johnson, Richard M., R. D. 6, Towanda. Possessing muskrat pelt during closed season Aug. 31, 1951
- Johnson, Theodore, R. D. 3, Wyalusing. Possessing parts of deer in closed season Aug. 31, 1951
- Johnson, Nathan T., R. D. 1, Sayre. Setting more than ten traps for beaver Aug. 31, 1951
- Palmer, Dean W., R. D. 1, Canton. Hunter damaging personal property Aug. 31, 1951
- Vandemark, Raymond S., R. D. 1, Sugar Run. Failure to stop motor vehicle upon signal of a Game Protector Aug. 31, 1951
- Vanderpool, James G., R. D. 6, Towanda. Possessing muskrat pelts during closed season Aug. 31, 1951

BUCKS

- Durns, Russell D., R. D. 1, Riegelsville. Possessing muskrat in closed season Aug. 31, 1951
- Luecke, Charles H., R. D. 1, Sellersville. Hunter injuring poultry Aug. 31, 1951
- Stover, Joseph C., Chase Ave., Ivyland. Attempting to kill second deer in one season Aug. 31, 1951
- Transue, Elmer E., R. D. 1, Bristol. Taking two muskrats in closed season Aug. 31, 1951

BUTLER

- Buffington, Robert G., R. D. 1, Zelienople. Killing male deer not having two points to one antler Aug. 31, 1951
- Thiebaud, Paul J., Division St., Zelienople. Killing male deer not having two points to one antler Aug. 31, 1951
- Torner, Clinton B., R. D. 2, Portersville. Giving false dates to secure bounty on two gray foxes and one weasel Aug. 31, 1951
- Whitman, Raymond L., Box 122, Cooperstown. Taking four muskrats in closed season; failure to display license tag while trapping Aug. 31, 1951

CAMBRIA

- Eger, Clarence E., 609 Portage Rd., Cresson. Hunting on Sanatorium grounds Aug. 31, 1951
- Jeschonek, Robert H., 386 Moore St., Johnstown. Hunting gray squirrel on Sunday Aug. 31, 1951
- Keith, Ronald C., R. F. D., Fallen Timber. Attempting to take wild turkey in closed season Aug. 31, 1951
- Lesko, William, R. D. No. 1, Pergrim Hill, Nanty Glo. Hunting without resident license; possession of parts of small game and furbearers in closed season Aug. 31, 1951
- Neibauer, Bernard J., R. F. D., Flinton. Possessing parts of deer in closed season; using vehicle or its lights to kill game Aug. 31, 1951
- Rodkey, James E., 634½ Fronheiser St., Johnstown. Hunting gray squirrel on Sunday Aug. 31, 1951
- Rodkey, Lester C., 634½ Fronheiser St., Johnstown. Hunting gray squirrel on Sunday Aug. 31, 1951
- Saline, Carl, Fallentimber. Possessing bear less than a year old Aug. 31, 1951
- Schleminger, Joseph, Beaverdale. Shooting within 150 yds. of occupied dwelling Aug. 31, 1950
- Westrick, Francis A., Jr., R. D. No. 1, Patton. Attempting to take wild turkey in closed season Aug. 31, 1951
- Wills, Bernard G., Dean. Attempting to take deer in closed season Aug. 31, 1952
- Wills, John C., Dean. Attempting to take deer in closed season Aug. 31, 1951

CARBON

- Fable, Clarence H., R. D. No. 3, Lehigh. Killing doe deer in closed season Aug. 31, 1952
- Green, Elwood W., R. D. No. 3, Lehigh. Possessing venison in closed season; hunting without resident license Aug. 31, 1951
- Nansteel, Burgess W., 125 Coal St., Lehigh. Throwing artificial light on deer while in possession of firearm Aug. 31, 1951
- Simmons, Wm. T., Jr., 325 N. Fifth St., Lehigh. Throwing artificial light on deer while in possession of a firearm Aug. 31, 1951
- Strohl, Arthur L., R. D. No. 3, Lehigh. Attempting to kill doe deer in closed season Aug. 31, 1951

CENTRE

- Bell, Richard E., Gen. Del., Philipsburg. Possessing doe deer taken in closed season Aug. 31, 1951
- Brown, Paul E., R. F. D. No. 1, Box 157, Centre Hall. Throwing artificial light upon deer while in possession of a firearm Aug. 31, 1951
- Cingle, Anthony J., Clarence. Possessing parts of a deer taken in closed season Aug. 31, 1951
- Confer, Clarence D., Centre Hall. Throwing artificial light upon deer while in possession of a firearm Aug. 31, 1951
- Davis, Edward E., Clarence. Possessing parts of a deer taken in closed season Aug. 31, 1951
- Fisher, Warren E., Wingate. Killing male deer not having two points to one antler Aug. 31, 1951
- Kepler, George D., Pine Grove Mills. Hunting for deer after having participated in the killing of a party limit Aug. 31, 1951
- Long, Harry J., R. F. D. No. 1, Centre Hall. Killing doe deer in closed season Aug. 31, 1951
- Meyers, Clarence C., Centre Hall. Throwing artificial light upon deer while in possession of a firearm Aug. 31, 1951
- Meyers, Joseph P., Pleasant Gap. Unlawfully removing dead deer from State Game Propagation Area Aug. 31, 1951
- Muirhead, John R., Clarence. Assisting in taking a deer in closed season Aug. 31, 1951
- Pachipko, John, Clarence. Possessing of one male deer in closed season Aug. 31, 1951
- Pachipko, Philip, Clarence. Killing and possessing one male deer in closed season Aug. 31, 1951

- Page, Gilbert F., Oak Hall Station. Possessing a legal male deer unlawfully taken; transporting untagged deer meat Aug. 31, 1951
- Shoemaker, Joseph C., 800 W. College Ave., State College. Hunted one day for deer after having participated in killing the season limit Aug. 31, 1951
- Shoemaker, Roy D., State College. Hunted one day for deer after having participated in killing the season limit Aug. 31, 1951
- Soltis, John, Clarence. Hunting while hunting rights have been denied Aug. 31, 1952
- Sweeley, Glenn E., R. F. D. No. 2, Spring Mills. Failure to stop motor vehicle upon signal of Game Protector Aug. 31, 1951

CHESTER

- Darlington, Charles S., 22½ King St., Malvern. Possessing spike buck deer killed in closed season Aug. 31, 1951
- Jackson, Robert D., 119 W. Barnard St., West Chester. Trapping muskrats during closed season Aug. 31, 1952
- Moore, Norman R., R. D. No. 2, Pottstown. Disturbing traps of another Aug. 31, 1951
- Mowday, Howard, 47 South Fourth St., Coatesville. Possessing parts of a deer killed in closed season Aug. 31, 1951
- Mowday, Joseph, 35 S. Fourth Ave., Coatesville. Killing a doe deer in closed season Aug. 31, 1951
- Rowe, Sewell M., 338 Jefferson Ave., Downingtown. Setting out four traps for furbearers before the opening hour Aug. 31, 1950
- Stanley, Ralph, 621 E. Main St., Coatesville. Possessing parts of deer killed in closed season Aug. 31, 1951
- Stanley, William, Box 77, Exton. Possessing parts of deer taken in closed season Aug. 31, 1951
- Vincent, Leo, Toughkenamon. Killing pheasant in closed season; hunting without resident license Aug. 31, 1951
- Wulderk, Faustino, 261 Pearl St., Bridgeton. Possessing two hen pheasants Aug. 31, 1951

CLARION

- Anthony, Leonard M., Curllsville. Assisting in killing a deer in closed season Aug. 31, 1951
- Beck, Raymond J., R. D. No. 3, Knox. Possessing muskrat pelt in closed season Aug. 31, 1950
- Clutter, William D., Curllsville. Killing a deer in closed season Aug. 31, 1951
- Downing, James W., R. D. No. 2, Lucinda. Possessing deer unlawfully killed Aug. 31, 1951
- Heeter, Floyd R., R. D. No. 2, Lucinda. Transporting deer unlawfully killed Aug. 31, 1951
- Hepner, Earl N., Box 141, West Monterey. Failure to report doe deer killed by mistake Aug. 31, 1951
- Hepner, Jack H., Box 141, West Monterey. Failure to report spike buck killed by mistake Aug. 31, 1951
- McNaughton, David H., Fisher. Possessing parts of illegally killed deer Aug. 31, 1951
- Reed, Eugene H., Clarion. Hunting deer in closed season Aug. 31, 1951
- Schill, Charles H., R. D. No. 2, Lucinda. Possessing five muskrat green pelts in closed season Aug. 31, 1951
- Slater, Sidney, Lucinda. Possessing a loaded rifle in vehicle in motion on highway. Also failure to stop upon signal of a Game Protector Aug. 31, 1951
- Snyder, Richard M., Hawthorn. Possessing parts of deer killed in closed season Aug. 31, 1951
- Uzmack, James, 8th Ave., Clarion. Possessing five green muskrat pelts taken in closed season Aug. 31, 1951
- Yeaney, Alonzo A., Hawthorn. Hunting deer in closed season Aug. 31, 1951

CLEARFIELD

- Andrako, Francis, Smoke Run. Possessing doe deer in closed season Aug. 31, 1951
- Andrako, John, Smoke Run. Possessing doe deer in closed season Aug. 31, 1951
- Bennett, Carl O., R. D. No. 1, Luthersburg. Possessing deer more than sixty day after the close of season Aug. 31, 1951
- Crook, Walter, R. D. No. 1, Mahaffey. Possessing parts of game taken in closed season Aug. 31, 1951
- Duke, Edward A., R. D. No. 3, Clearfield. Making false statement to secure hunting license while hunting rights have been denied Aug. 31, 1951
- Glass, Elliott A., R. F. D., Utahville. Attempting to take wild turkey in closed season Aug. 31, 1951
- Grove, Charles H., Rockton. Possessing deer taken in closed season Aug. 31, 1951
- Hatch, Ralph L., R. D., Karthus. Possessing parts of deer taken in closed season Aug. 31, 1951
- Kauffman, Robert L., R. D. No. 1, Mahaffey. Attempting to kill a deer in closed season; possessing loaded rifle in vehicle in motion on highway Aug. 31, 1951
- Kolivoski, Mike, R. D., Karthus. Possessing parts of two deer taken in closed season Aug. 31, 1951
- Kolivoski, Robert, Karthus. Possessing parts of two deer taken in closed season and possessing one grouse taken in closed season Aug. 31, 1951
- Kowalczyk, Ben, Madera. Killing doe deer in closed season Aug. 31, 1951
- McGonigal, Raymond R., Karthus. Possessing part of deer taken in closed season Aug. 31, 1951
- Miller, Duaine, Drifting. Possessing parts of a deer in close season Aug. 31, 1951
- Peace, Allen E., R. D. No. 1, Mahaffey. Attempting to kill a deer in close season; possessing loaded rifle in vehicle on highway Aug. 31, 1951
- Snyder, Allen L., Gramplan. Killing and assisting to conceal game unlawfully killed; hunting while hunting rights have been denied Aug. 31, 1952
- Snyder, Arthur, R. D. No. 2, Mahaffey. Assisting to conceal game unlawfully killed Aug. 31, 1951
- Soliday, Ralph, R. D., Olanta. Hunting without resident license Aug. 31, 1951
- Soliday, Ralph S., R. D., Olanta. Hunting while hunting rights have been denied Indefinitely
- White, Theodore E., R. D. No. 2, Mahaffey. Possessing parts of two squirrels taken in close season Aug. 31, 1951

CLINTON

- Fiedler, George O., Castanea. Possessing parts of doe deer taken in close season Aug. 31, 1951
- Grabler, Alvin L., Box 430, North Bend. Possessing parts of a deer in close season Aug. 31, 1951

Johnson, Robert E., R. D. No. 1, Lock Haven. Possessing parts of a deer taken in close season; using a motor vehicle to transport game illegally killed	Aug. 31, 1950
Keeler, Charles I., R. D. No. 2, Jersey Shore. Hunting deer between 5:00 p. m. and 7:00 a. m.	Aug. 31, 1951
Pelton, Edward, Westport. Possessing parts of a deer taken illegally	Aug. 31, 1951
Thompson, Harry L., R. D. No. 2, Jersey Shore. Possessing parts of a doe deer taken in close season	Aug. 31, 1951
Tyson, James E., Box 49, Castanea. Killing doe deer in close season	Aug. 31, 1951
Wolfe, James W., R. D. No. 2, Jersey Shore. Possessing parts of doe deer taken in close season	Aug. 31, 1951
Young, Albert, Westport. Possessing parts of a deer in the close season	Aug. 31, 1951

COLUMBIA

Ent, Franklin A., R. D. No. 1, Nescopeck. Setting trap closer than 25' from established beaver house	Aug. 31, 1952
Kline, John S., Stillwater. Possessing male deer taken in close season	Aug. 31, 1951
Krum, Herbert J., R. D. No. 5, Bloomsburg. Killing male ringneck in close season	Aug. 31, 1951
Roberts, Frank H., 353 Miller Ave., Bloomsburg. Hunter injuring livestock	Aug. 31, 1951
Vezendi, Lewis C., 1329 Second Ave., Berwick. Hunter injuring livestock, namely a dog	Aug. 31, 1951

CRAWFORD

Davis, George W., 9 Lafayette St., Titusville. Destroying trees on State Game Lands	Aug. 31, 1951
Duraso, Andy, R. D. No. 3, Saegertown. Attempting to kill a doe deer in close season	Aug. 31, 1951
Hall, Almon H., R. D. No. 1, Atlantic. Disturbing traps of another	Aug. 31, 1951
McCain, Ernest W., R. D. No. 3, Titusville. Destroying two trees on State Game Lands No. 96	Aug. 31, 1951
Quigley, Burdett, R. D. No. 1, Atlantic. Disturbing traps of another	Aug. 31, 1951
Shrout, Milford W., 630 Spruce St., Titusville. Possessing parts of bear less than one year old	Aug. 31, 1951
Shull, Max E., R. D. No. 2, Geneva. Possessing parts of doe deer in close season	Aug. 31, 1951
Speck, Joseph A., R. D. No. 2, Cambridge Springs. Killing a doe deer in close season	Aug. 31, 1951
Stoudt, Samuel J., R. D. No. 1, Springboro. Attempting to kill a doe deer in close season	Aug. 31, 1951
Voisin, Paul L., 609 W. Spruce St., Titusville. Destroying two trees on State Game Lands	Aug. 31, 1951

CUMBERLAND

Bernhisel, Robert E., R. D. No. 1, Carlisle. Killing two rabbits in close season	Aug. 31, 1951
Coffey, Ray E., 603 Brandt Ave., New Cumberland. Killing male ringneck pheasant in close season	Aug. 31, 1951
Hoover, Harold L., R. D. No. 2, Newville. Killing a ringneck pheasant hen during the close season	Aug. 31, 1951
Lechthaler, Earl R., 423 Third St., New Cumberland. Killing ringneck pheasant hen	Aug. 31, 1951
Murray, David R., 315 Market St., New Cumberland. Shooting within 150 yds. of occupied buildings	Aug. 31, 1951
Sanderson, Maurice V., R. D. No. 4, Mechanicsburg. Shooting within 150 yds. of occupied bldgs. without permission of occupant	Aug. 31, 1951
Showaker, Paul L., R. D. No. 2, Newville. Killing a male ringneck pheasant during the close season; shooting within 150 yds. of occupied bldg	Aug. 31, 1951

DAUPHIN

Albert, Lank F., 111 Fisher Ave., Middletown. Lending license to another	Aug. 31, 1950
Killinger, Herbert E., 464 N. Front St., Steelton. Killing deer in close season	Aug. 31, 1950
Kosutic, Peter F., 512 Monroe St., Steelton. Possessing and concealing one deer illegally killed	Aug. 31, 1951
Lamason, Jacob, Colonial & Devonshire Rds., Harrisburg. Refusing to show license to landowner	Aug. 31, 1950
Morton, Charles S., 2701 Booser Ave., Penbrook. Killing a male deer not having two or more points to one antler ..	Aug. 31, 1951
Parmer, Alvin M., R. D. No. 2, Halifax. Possessing female deer taken in close season	Aug. 31, 1951
Potteiger, Calvin C., R. D. No. 3, Harrisburg. Shooting across highway while hunting game	Aug. 31, 1950
Sipe, Roy L., 14 Tioga St., Rutherford Hts. Shooting within 150 yds. of an occupied dwelling	Aug. 31, 1952

DELAWARE

Basner, Ernest L., 425 Fernwood Ave., Folsom. Possessing hen pheasant	Aug. 31, 1951
Bixler, Clarence, 512 Third Street, Upland. Setting two traps within 25' of constructed beaver dam	Aug. 31, 1951
Leslie, Bernard, R. D. No. 1, Twin Oaks. Using vehicle to kill game	Aug. 31, 1951
Michael, George W., 41 Bunting Lane, Green Ridge. Killing ringneck pheasant hen	Aug. 31, 1951
Riddle, William, Walters Road, Glen Mills. Killing ringneck pheasant in close season	Aug. 31, 1951
Stahler, Wm. T., 255 Lexington Ave., Eddystone. Failure to produce head of deer upon demand of officer	Aug. 31, 1951

ELK

Gleixner, Herbert L., Lenze St., St. Marys. Aiding and assisting with transporting and concealing two deer illegally killed	Aug. 31, 1951
Kraus, Eugene A., 541 Walnut St., St. Marys. Aiding, assisting in transporting and concealing two deer illegally killed	Aug. 31, 1951
Meixel, Verus, Paul, Force. Killing a second deer in one season	Aug. 31, 1951
Siecker, John H., R. D. No. 1, Paul St., St. Marys. Failure to produce head of two deer on demand of an officer ..	Aug. 31, 1952

ERIE

Allen, Richard G., 854 Priestly Ave., Laurence Park, Erie. Failure to pick up three muskrat traps at close of season	Aug. 31, 1950
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Antolik, George, Peck Road, R. D. No. 6, Erie. Killing doe deer in close season	Aug. 31, 1951
Burckart, Edward G., 510 W. 10th St., Erie. Possessing muskrat pelt taken in close season	Aug. 31, 1950
Gross, Ronald A., 801 E. 23rd St., Erie. Destroying two trees on S. G. L. No. 109	Aug. 31, 1951
Harned, Wallace R., R. D. No. 4, Erie. Setting traps for furbearers other than otter or beaver prior to opening hour	Aug. 31, 1950
Hearn, III, Chester G., 519 Shenley St., Erie. Possessing muskrat (skin) taken in close season	Aug. 31, 1950
Krusiak, Alex A., 740 E. 24th St., Erie. Killing fox squirrel in close season	Aug. 31, 1951
Kuholski, Walter W., R. D. No. 6, Peck Rd., Erie. Possessing deer unlawfully taken in close season	Aug. 31, 1951
Locke, James E., R. D. No. 5, North East. Killing two squirrels in close season	Aug. 31, 1950
McClelland, Donald J., R. D. No. 5, North East. Killing one squirrel in close season	Aug. 31, 1950
McCool, George E., 546 W. 8th St., Erie. Destroying three trees on State Game Lands No. 96	Aug. 31, 1951
Morris, John J., 430 Raspberry St., Erie. Destroying one tree on State Game Lands No. 109	Aug. 31, 1951
Chamberlain, Glen, R. D. No. 2, Box 265-B, Uniontown. Possessing parts of deer taken in close season	Aug. 31, 1952

FAYETTE

Humbertson, Elmer W., Box 51, Markleysburg. Possessing doe, deer taken in close season	Aug. 31, 1951
Mays, Leroy R., Indian Head. Possessing rabbit unlawfully taken; hunting game between 5:00 p. m. and 7:00 a. m. ..	Aug. 31, 1951
Pierce, Harry E., S. Connellsville. Possessing four gray squirrels over daily limit	Aug. 31, 1951
Raymond, Daniel, Chalk Hill. Possessing parts of deer taken in close season	Aug. 31, 1951
Trenker, Louis, Dunbar. Killing male ringneck pheasant in close season	Aug. 31, 1951

FRANKLIN

Brookens, Ellis H., Route 1, Fayetteville. Possessing parts of a deer unlawfully taken	Aug. 31, 1951
Brookens, Frank A., Jr., Route 1, Fayetteville. Possessing parts of a deer unlawfully taken	Aug. 31, 1951
Forrester, Stoev W., Rt. 3, Shippensburg. Interfering with a State Officer in the performance of his duty	Aug. 31, 1952
Henry, Roy J., Route 1, Fayetteville. Possessing parts of a deer unlawfully taken	Aug. 31, 1951
Hepfer, John, 238 E. King St., Chambersburg. Concealing meat of a deer unlawfully taken	Aug. 31, 1951
McNamee, Robert L. E., 270 Ridge Ave., Greencastle. Killing doe deer in close season	Aug. 31, 1951
Myers, Benjamin F., R. D. No. 1, Mercersburg. Possessing parts of one gray squirrel in close season	Aug. 31, 1951
Pittman, Roy H., R. D. No. 1, Mercersburg. Possessing skin of a furbearing animal unlawfully killed	Aug. 31, 1951
Ramsey, Joseph J., No. 1 Hemlock Circle, Chambersburg. Killing spike buck deer in close season	Aug. 31, 1951
Shelly, Robert E., 524 Poplar Ave., Chambersburg. Transporting a deer unlawfully taken	Aug. 31, 1951
Ulrich, Harold F., R. D. No. 1, Fayetteville. Possessing parts of a deer unlawfully taken	Aug. 31, 1951

FULTON

Schultz, Harold M., Amaranth. Possessing ruffed grouse taken in close season	Aug. 31, 1951
Washabaugh, David A., McConnellsburg. Killing a protected game animal, namely a bear in close season	Aug. 31, 1951

HUNTINGDON

Christoff, Peter S., Mount Union. Possessing doe deer in close season	Aug. 31, 1951
Lauver, William W., Spruce Creek. Possessing parts of deer in close season	Aug. 31, 1951
McGee, Walter J., Robertsdale. Assisting to take and concealing an illegal deer	Aug. 31, 1951
Romine, Merrill K., Robertsdale. Assisting to take and conceal an illegal deer	Aug. 31, 1951
Shoemaker, William C., Pa. Furnace. Hunted one day for deer after having participated in killing the season limit	Aug. 31, 1951
Sorra, Anthony H., 110 Vandevender St., Mt. Union. Possessing doe deer in close season	Aug. 31, 1951
Sparks, Allen H., Broad Top City. Possessing deer illegally taken	Aug. 31, 1951
Speck, Alvin C., 819 Mt. Vernon Ave., Huntingdon. Assisting to conceal game unlawfully killed	Aug. 31, 1951
Speck, Cloyd L., R. D. No. 1, Huntingdon. Assisting to conceal game unlawfully killed	Aug. 31, 1951
Wilson, Sharron R., R. D., Shade Gap. Attempting to kill a deer in close season	Aug. 31, 1951

INDIANA

Belice, August, Edri. Possessing doe deer in close season ..	Aug. 31, 1951
Edwards, William L., R. D. No. 1, Home. Possessing a male deer in close season	Aug. 31, 1951
Ferrier, Leroy W., R. F. D. No. 2, Indiana. Possessing parts of spike buck deer taken in close season	Aug. 31, 1951
Jennings, Richard C., Graceton. Attempting to kill ringneck pheasant in close season	Aug. 31, 1951
Lambing, William H., General Delivery, Mooween. Possessing a loaded shotgun in vehicle in motion upon a public highway	Aug. 31, 1950
States, James L., 203 Grandview Ave., Indiana. Possessing parts of spike buck deer taken in close season	Aug. 31, 1951

JEFFERSON

Davis, Russell V., General Delivery, Brockway. Killing male deer in close season	Aug. 31, 1951
Giughello, Pete D., Crenshaw. Possessing fox squirrel taken in close season	Aug. 31, 1950
Guy, John C., Crenshaw. Possessing fox squirrel taken in close season	Aug. 31, 1950

JUNIATA

Lauver, Charles W., R. D. 2, Port Royal. Possessing deer meat taken in close season	Aug. 31, 1951
Lauver, Mrs. Charles W., R. D. 2, Mifflintown. Possessing deer meat taken in close season	Aug. 31, 1951

Yohn, Robert M., Port Royal. Possessing deer meat taken in close season Aug. 31, 1951

LACKAWANNA

Calvert, Jr., Walter J., 1010 Fifth St., Moosic. Possessing doe deer unlawfully taken Aug. 31, 1950
Kosiorek, Victor, Thornhurst. Possessing parts of deer unlawfully taken Aug. 31, 1951
Merrigan, Robert M., 917 Fairview Ave., Peckville. Killing doe deer in close season Aug. 31, 1951
Morgan, David, 124 Railroad St., Taylor. Possessing doe deer unlawfully taken Aug. 31, 1951
Ungvasky, Stephan A., 929 Providence Rd., Scranton. Killing doe deer in close season Aug. 31, 1951

LANCASTER

Dietrich, Kenneth W., R. F. D. No. 1, Lititz. Killing black bear in close season Aug. 31, 1951
Killian, Ferman R., 917 Homeland Drive, Lancaster. Hunting and pursuing game in a Safety Zone Aug. 31, 1951
Loran, George A., 421 Queen St., Lancaster. Shooting within 150 yds. of an occupied building Aug. 31, 1952
Marzinko, Kenneth B., Hotel Kinney, Columbia. Attempting to kill hen pheasant in close season Aug. 31, 1951
Miller, Kenneth E., 20 N. Spruce St., Lititz. Killing ringneck pheasant hen Aug. 31, 1951
Murry, Emanuel E., R. D. No. 4, Lancaster. Hunting and pursuing game birds and game animals in a Safety Zone Aug. 31, 1951
Myers, Enos H., R. D. No. 1, Pequea. Possessing ringneck pheasant hen Aug. 31, 1951
Plank, Edward H., 366 E. Main St., New Holland. Possessing one male ringneck pheasant over the daily limit .. Aug. 31, 1950
Salzman, Frederick, 137 S. 4th St., Columbia. Attempting to kill hen pheasants in close season Aug. 31, 1951
Shirk, Harvey M., 15 W. Maple St., Lititz. Attempting to kill ringneck pheasant hen Aug. 31, 1951
Suess, August, R. D. No. 3, Lititz. Assisting to conceal a deer unlawfully killed; failure to maintain complete roster Aug. 31, 1951
Wenzel, John D., R. D. No. 1, Washington Boro. Possessing one male pheasant over daily limit Aug. 31, 1950

LAWRENCE

Anderson, Charles L., R. D. No. 2, New Wilmington. Assisting to conceal game unlawfully killed Aug. 31, 1951
Anderson, Clarence E., R. D. No. 2, New Wilmington. Assisting to conceal game (deer) unlawfully taken Aug. 31, 1951
Anderson, Paul R., R. D. No. 2, New Wilmington. Assisting to conceal game (deer) unlawfully taken Aug. 31, 1951
Bales, Ray D., 215 N. Scott St., New Castle. Hunting within 150 yds. of occupied buildings Aug. 31, 1951
Canfora, Philip C., 1033 Bickford Ave., New Castle. Killing illegal deer (spike buck) Aug. 31, 1951
Jones, Clarence G., R. D. No. 4, New Castle. Hunting without resident hunting license Aug. 31, 1951
Samiac, Mike A., 921 Woodlawn Ave., New Castle. Possessing deer unlawfully taken Aug. 31, 1951

LEBANON

Donough, Harold G., R. D. No. 1, Lebanon. Attempting to kill a second deer in one season Aug. 31, 1952
Gingrich, Paul L., R. D. 1, Myerstown. Shooting at and attempting to kill an antlerless deer in close season .. Aug. 31, 1951
Keener, Louis M., Scheafferstown. Possessing a deer unlawfully killed; using motor vehicle to transport deer illegally killed; failure to maintain complete roster of party hunting big game Aug. 31, 1951
Kohl, Warren P., 458 E. Cumberland St., Lebanon. Possessing a deer unlawfully taken; using motor vehicle to transport deer illegally killed; failure to maintain complete roster of party hunting big game Aug. 31, 1951
Netzley, Walter S., R. F. D. No. 2, Myerstown. Possessing male deer not having two points to one antler Aug. 31, 1951
Schneck, Clark B., Newmanstown. Assisting to conceal a deer unlawfully killed; failure to maintain complete roster Aug. 31, 1951

LEHIGH

Cressman, Kenneth V., Limeport. Attempting to kill a second deer in one season Aug. 31, 1951
Davis, Reynold W., 3600 Hamilton St., Allentown. Killing doe deer in close season Aug. 31, 1951
Koppenhaver, Ernest F., 427 Oswego St., Allentown. Killing ringneck pheasant hen Aug. 31, 1951
Miller, Kermit F., Wescosville. Killing ringneck pheasant cock in close season Aug. 31, 1951
Miller, Raymond I., R. D. No. 4, Allentown. Attempting to kill a second deer in one season Aug. 31, 1951
Miller, Stanley J., 1127 Calypso Ave., Bethlehem. Possessing doe deer in close season Aug. 31, 1951
Peters, Henry T., Emerald. Killing doe deer in close season Aug. 31, 1951
Rice, Earl W., 41 W. 4th St., Northampton. Using a motor vehicle to hunt game Aug. 31, 1951
Saylor, Robley E., R. D. No. 4, Allentown. Attempting to kill a second deer in one season Aug. 31, 1951
Wendling, Fred F., R. No. 1, Wescosville. Disturbing traps of another; setting five steel traps closer than five feet from hole Aug. 31, 1951

LUZERNE

Baer, Eugene W., Jr., Conyngham. Hunting within 150 yds. of occupied building Aug. 31, 1951
Berretta, Silvio C., 1815 Wyoming Ave., Exeter. Killing doe deer in close season Aug. 31, 1951
Lapinski, Vincent A., Pond Hill Rd., Mocanaqua. Possessing five muskrats in close season Aug. 31, 1951
Martin, Edward D., R. D. No. 2, Wilkes-Barre. Possessing deer unlawfully taken Aug. 31, 1951
Obrinski, Walter, 763 Grant St., Hazleton. Possessing deer unlawfully taken Aug. 31, 1951
O'Hop, Vincent J., 1013 Plane St., Avoca. Failure to accompany officer after arrest Aug. 31, 1951

Spirko, Joseph A., 290 Academy St., Luzerne. Hunting rabbits with shotgun containing more than three shells .. Aug. 31, 1951
Stefanko, George, 1 Cliff St., Pittston. Securing hunter's license while hunting rights have been denied Indefinitely
Vaessen, Carl P., 243 Poplar St., Wilkes-Barre. Shooting at a squirrel within 150 yds. of an occupied building .. Aug. 31, 1951
Ziegler, Edward J., R. D. No. 2, Avoca. Possessing deer unlawfully taken Aug. 31, 1951
Ziminsky, Joseph J., R. D. No. 1, White Haven. Possessing hide and head of spike buck deer; also seven quarts of canned venison Aug. 31, 1951
Zwolinski, Adolph, 196 Cooper St., Courtdale, Wilkes-Barre. Possessing loaded rifle in vehicle standing on highway; using a motor vehicle to hunt game Aug. 31, 1952

LYCOMING

Bower, Edward F., R. D. No. 3, Williamsport. Hunting deer between 5:00 p. m. and 7:00 a. m. Aug. 31, 1952
Dunlap, William J., R. D. 2, Jersey Shore. Possessing parts of doe deer taken in close season Aug. 31, 1951
Griffith, Felix V., R. D. No. 2, Cogan Station. Possession of deer unlawfully taken Aug. 31, 1951
Hartranft, Harry C., R. D. 1, Williamsport. Hunting on Sunday Aug. 31, 1952
Hayes, Anson, 1209 Race St., Williamsport. Possessing the skin of a mink unlawfully taken Aug. 31, 1950
Krape, Frederick O., Waterville. Attempting to kill a deer in close season Aug. 31, 1951
Lewis, James W., Proctor Star Route, Williamsport. Attempting to kill a deer in close season Aug. 31, 1951
Litzelman, Mathias S., R. D. No. 1, Trout Run. Possession of a deer illegally taken Aug. 31, 1951
Long, Joseph C., R. D. No. 1, Trout Run. Possession of a deer illegally taken Aug. 31, 1951
Lowe, Zaney H., R. D. No. 4, Muncy. Possessing skins of five muskrats unlawfully killed; setting three traps untagged; possessing skin of mink unlawfully killed .. Aug. 31, 1951
McBride, Wilbur E., 78 N. Main St., Hughesville. Possessing parts of a deer unlawfully taken Aug. 31, 1951
Mahaffey, Lawrence E., R. D. No. 2, Montoursville. Killing game (rabbit) on Sunday; possessing a rabbit unlawfully taken Aug. 31, 1951
Merrick, Elmer D., 464 Elmira St., Williamsport. Failure to tag five traps set for muskrats Aug. 31, 1952
Merrick, Richard W., 406 E. Mountain Ave., S. Williamsport. Failure to tag five traps set for muskrats Aug. 31, 1952
Miller, Robert D., R. D. 2, Jersey Shore. Possessing parts of doe deer taken in close season Aug. 31, 1951
Phillips, Fred L., R. D. No. 3, Muncy. Possessing parts of deer unlawfully taken Aug. 31, 1951
Phillips, James H., 325 S. Main St., Hughesville. Possessing parts of deer unlawfully taken Aug. 31, 1951
Saylor, Glen H., 532 7th Ave., Williamsport. Possessing three deer in close season Aug. 31, 1951
Schick, Charles A., R. D. No. 2, Muncy. Aiding in the concealment of one deer unlawfully killed Aug. 31, 1951
Schick, Francis E., R. D. No. 2, Muncy. Killing one deer by aid of artificial light Aug. 31, 1951
Schriner, Edward D., 127 Arch St., Williamsport. Possessing parts of a deer in close season Aug. 31, 1951
Shaylor, Howard N., Waterville. Attempting to kill a deer in close season Aug. 31, 1951
Spong, Wesley G., R. D. No. 1, Jersey Shore. Possessing ing parts of a deer in close season Aug. 31, 1951
Wagner, Eugene T., R. D. No. 2, Jersey Shore. Possessing parts of a deer taken in close season Aug. 31, 1950
Walters, George A., R. D. No. 1, Hughesville. Possessing parts of a deer in close season Aug. 31, 1951
Welshans, Harold H., R. D. No. 2, Jersey Shore. Killing a rabbit in close season Aug. 31, 1951
Willits, William C., R. D. No. 1, Jersey Shore. Possessing parts of a deer in close season Aug. 31, 1951
Winchester, Harry L., 315 Cemetery St., Jersey Shore. Possessing parts of a deer taken in close season; using a motor vehicle to transport game illegally killed .. Aug. 31, 1950
Wool, Francis E., 833 Wayne Ave., Williamsport. Failure to report shooting accident causing injury to himself, within 72 hrs. after the accident happened Aug. 31, 1951
Yeager, Fred W., Jr., 118 Spruce St., Jersey Shore. Disturbing wild ducks within a Safety Zone Aug. 31, 1951

McKEAN

Connor, Clifford B., Betula. Aiding and assisting in killing a male deer in close season Aug. 31, 1951
Cunningham, Charles J., Betula. Killing male deer in close season Aug. 31, 1951
Cunningham, Richard M., Crosby. Aiding and assisting in killing male deer in close season Aug. 31, 1951
Lloyd, Carney B., Box 17, Duke Center. Possessing a spike buck deer in close season Aug. 31, 1951
Scott, John L., Mt. Alton. Interfering with State Officer in performance of duty Aug. 31, 1951
Stewart, Alvin L., East Smethport. Killing a doe deer and a spike buck deer in close season Aug. 31, 1951

MERCER

Anderson, Samuel J., 100 Beaver St., Mercer. Assisting to conceal game (deer) unlawfully taken Aug. 31, 1951
Biros, Mike, R. D. No. 2, Sharon. Using an artificial light on vehicle to take rabbits and hunting small game (rabbits) between 5:00 p. m. and 7:00 a. m. Aug. 31, 1950
Biros, Mike, R. D. No. 2, Sharon. Using an artificial light on vehicle to take rabbits and hunting small game (rabbits) between 5:00 p. m. and 7:00 a. m. Aug. 31, 1950
Humenik, George, R. D. No. 1, Transfer. Possessing a spike buck deer in close season Aug. 31, 1951
McClung, Norville E., R. D. No. 2, Stoneboro. Destroying tree on State Game Lands Aug. 31, 1951
Slater, George H., R. D. No. 1, Stoneboro. Failure to produce the heads of three big game animals on demand of officer Aug. 31, 1951
Slater, Harlan E., R. D. 1, Stoneboro. Failure to produce head of deer upon demand of an officer Aug. 31, 1951
Slater, James E., R. D. No. 1, Stoneboro. Possessing deer in close season Aug. 31, 1951

MIFFLIN

Adams, Melvin B., Mattawana. Possessing spike buck deer in close season	Aug. 31, 1951
Anderson, Ralph A. Possessing spike buck in close season ..	Aug. 31, 1951
Forshey, Albert R., McVeytown. Possessing doe deer in close season	Aug. 31, 1951
Forshey, Paul E., R. D. No. 1, McVeytown. Possessing doe deer in close season	Aug. 31, 1951
Forshey, Robert L., McVeytown. Possessing doe deer in close season	Aug. 31, 1951
Hastings, Clarence J., McVeytown. Possessing doe deer in close season	Aug. 31, 1951
Kauffman, Russell E., R. D. No. 2, Lewistown. Possessing spike buck deer in close season	Aug. 31, 1951

MONROE

Danish, Erich F., Scotrun. Possessing parts of deer taken in close season	Aug. 31, 1951
Eddinger, Russel E., R. D. No. 3, Stroudsburg. Killing doe deer in close season	Aug. 31, 1951
Freeman, Milton A., 173 Meyers St., East Stroudsburg. Possessing parts of doe deer taken in close season	Aug. 31, 1951
Gardner, Lewis F., Fern Ridge. Killing doe deer in close season	Aug. 31, 1951
Keiper, Thomas, Long Pond. Possessing parts of hen pheasant; possessing deer unlawfully taken	Aug. 31, 1951
Keller, Robert H., R. D. No. 1, Kunkletown. Possessing loaded rifle in vehicle in motion on highway; failure to stop motor vehicle upon signal of Game Protector ..	Aug. 31, 1951
Mart, Fred J., 194 Elizabeth St., East Stroudsburg. Possessing parts of doe deer in close season	Aug. 31, 1951
Metzgar, Charles P., 145 W. Broad St., East Stroudsburg. Taking three muskrats in close season	Aug. 31, 1951
Slack, Ralph L., 173 Meyers St., E. Stroudsburg. Killing doe deer in close season	Aug. 31, 1952
Smith, Thomas J., Pocono Pines. Killing a hen ringneck pheasant	Aug. 31, 1950
Transue, Harold L., R. D. No. 1, Henryville. Taking three muskrats in close season	Aug. 31, 1951
Weiss, Clarence, R. D. No. 1, Saylorsburg. Possessing parts of two deer in close season	Aug. 31, 1951
Williams, Thomas G., R. D. No. 1, Stroudsburg. Possessing parts of deer in close season	Aug. 31, 1951

MONTGOMERY

Fazekas, John J., 335 Ash St., Stowe. Hunting and shooting in a Safety Zone within 150 yards of occupied buildings	Aug. 31, 1952
Ferla, Paul, 35 Belmont Ave., Ambler. Purchasing or receiving raw fur without resident permit for commercial purposes	Aug. 31, 1950
Hollman, Charles, Huntingdon Valley. Attempting to kill rabbit in close season	Aug. 31, 1951
Jasinski, Stanley, R. D. No. 1, Green Lane. Killing button buck deer in close season	Aug. 31, 1950
Johnson, Robert E., 2205 Hamilton Ave., Willow Grove. Refusing to show hunter's license on demand; hunting game with unplugged shotgun	Aug. 31, 1952
Matczak, Thomas, R. D. No. 1, Green Lane. Aiding and assisting to conceal game, button buck deer, killed illegally	Aug. 31, 1950

MONTOUR

Bloskey, Edward A., 540 Mill St., Danville. Shooting rabbit on highway	Aug. 31, 1950
Moyer, Peter J., 126 Bank St., Danville. Shooting at game on public highway	Aug. 31, 1951
Underwood, Carl J., 100 Jefferson St., Danville. Killing a second deer in one season	Aug. 31, 1951

NORTHAMPTON

Horn, Clayton M., R. F. D. No. 2, Bangor. Killing two antlerless deer in close season	Aug. 31, 1951
Meixsell, Russell, R. D. No. 2, Bath. Failure to show hunter's license on demand	Aug. 31, 1951
Reisenweitz, Aaron S., R. D. 1, Bangor. Killing male ringneck pheasant in close season	Aug. 31, 1951
Stevens, John W., R. No. 1, Danielsville. Killing antlerless deer in close season	Aug. 31, 1951

NORTHUMBERLAND

McCollum, Daniel T., Rear 46 Upper Market St., Milton. Possessing pheasant hen	Aug. 31, 1951
Mengle, George A., R. D. No. 1, Sunbury. Entering in and on State Propagation Area	Aug. 31, 1951
Shoop, Edwin D., Box 146, Dalmatia. Possessing one squirrel over daily limit	Aug. 31, 1950

PERRY

Davis, Wilbur J., Marysville. Hunting for wild game (deer) and taking advantage of an artificial light ..	Aug. 31, 1951
Edwards, William, Marysville. Hunting for wild game (deer) and taking advantage of an artificial light ..	Aug. 31, 1951
Ewing, Glenn W., R. D. No. 1, Newport. Failure to produce head of deer on demand of officer	Aug. 31, 1951
Fultz, Brooks, F., Ickesburg. Shooting within 150 yds. of occupied buildings	Aug. 31, 1951
Henry, Raymond W., R. D. No. 1, Blain. Using artificial lights to take rabbits and shooting within 150 yds. of an occupied building	Aug. 31, 1951
Hess, Russell L., R. D. No. 1, Blain. Hunting without resident license; using artificial lights to take rabbits; shooting within 150 yds. of occupied bldg.	Aug. 31, 1951
Lutz, Evans E., R. D. No. 1, Marysville. Shooting within 150 yds. of an occupied bldg.	Aug. 31, 1951

PHILADELPHIA

Adams, Harry W., 2025 Arch St., Philadelphia. Hunting without resident license; killing one grouse in close season	Aug. 31, 1951
Chafin, Earl F., 1539 S. 26th St., Philadelphia 46. Possessing a protected bird, namely flicker	Aug. 31, 1950

DiGiulio, Antonio, 521 W. Olney Ave., Philadelphia 20. Hunting game rabbits and pheasants on Propagation Area	Aug. 31, 1950
DiGiulio, Thomas, 627 E. Anchor St., Philadelphia. Hunting without resident license; hunting game pheasants and rabbits on a State Game Propagation Area	Aug. 31, 1951
Galie, Romolo H., 5322 Stiles St., Philadelphia. Possessing doe deer in close season	Aug. 31, 1951
Gettis, William J., 1914 E. Orleans St., Philadelphia. Possessing deer unlawfully taken; transporting deer unlawfully taken	Aug. 31, 1951
Haurin, Thomas, 4714 Marple St., Philadelphia. Killing ringneck pheasant hen	Aug. 31, 1951
Jonik, Joseph, 2313 Amber St., Philadelphia. Possessing ringneck pheasant hen	Aug. 31, 1951
McRee, Hubert F., 6704 Dorel St., Philadelphia 14. Shooting at pheasant in close season	Aug. 31, 1951
Malopolski, Matthew, 2734 E. Indiana Ave., Philadelphia. Assisting to transport one antlerless deer taken in close season	Aug. 31, 1951
Malopolski, Theodore W., 6050 Norwood St., Philadelphia. Transporting parts of one antlerless deer taken in close season	Aug. 31, 1951
March, William L., 505 W. Rising Sun Ave., Philadelphia. Killing male deer not having two points to one antler ..	Aug. 31, 1951
Marino, Armond J., 2637 Titan St., Philadelphia. Killing wild duck in close season	Aug. 31, 1951
Mobley, James A., 1809 Tasker St., Philadelphia. Possessing hen pheasant	Aug. 31, 1951
Nicola, Mastroieni, 3005 N. 22nd St., Philadelphia. Unlawfully removing a dead deer from a State Game Refuge ..	Aug. 31, 1951
Rugan, John E., 4904 N. 12th St., Philadelphia. Killing male deer in close season	Aug. 31, 1951
Russo, Albert J., 4856 Merion St., Philadelphia. Possessing doe deer in close season	Aug. 31, 1951
Siegle, Milton C., 1417 E. Lycoming St., Philadelphia. Possessing deer unlawfully taken; transporting deer unlawfully taken	Aug. 31, 1951
Stewart, Robert L., 905-C Parrish Place, Philadelphia. Possessing protected bird, Heron	Aug. 31, 1950
Verdecchio, Nunzio A., 4944 W. Thompson St., Philadelphia. Possessing doe deer in close season	Aug. 31, 1951
Verrecchio, Ido J., 3910 W. 6th St., Philadelphia. Assisting to conceal parts of game not having two points to one antler	Aug. 31, 1951

PIKE

Lovelace, John, Shohola. Possessing two raccoon pelts in close season	Aug. 31, 1951
Rolason, LeRoy, Lords Valley. Setting beaver trap less than 25' from beaver house	Aug. 31, 1951
Singer, Clinton E., Star Route, Hawley. Possessing parts of a doe deer during the close season	Aug. 31, 1951

POTTER

Beals, Gordon E., R. D. No. 3, Coudersport. Possessing an antlerless deer unlawfully taken	Aug. 31, 1951
Davis, Leroy B., R. D. No. 1, Roulette. Failure to take up or spring traps at close of season	Aug. 31, 1950
Schoonover, John F., General Delivery, Shinglehouse. Taking raccoon in close season; disturbing traps of another	Aug. 31, 1951
Smith, Homer H., Box 85, Galeton. Taking three muskrats in close season; failure to tag two traps	Aug. 31, 1951
Worden, Robert W., Box 85, Galeton. Taking three muskrats in close season; failure to tag two traps	Aug. 31, 1951

SCHUYLKILL

Levan, Charles E., Church St., Pine Grove. Killing two male ringneck pheasants in close season	Aug. 31, 1951
O'Neill, Earl R., 324½ W. Lloyd St., Shenandoah. Making false statement to secure hunting license; hunting while hunting rights denied; securing license while rights have been denied	Aug. 31, 1952
Womer, Elbert F., R. F. D. No. 1, New Ringgold. Attempting to kill deer while using .22 cal. rimfire cartridge ...	Aug. 31, 1951

SNYDER

Keister, Harry R., General Delivery, Pennscreek. Hunting without resident hunting license	Aug. 31, 1951
Keller, Andrew D., 308 N. High St., Selinsgrove. Entering and hunting Game Propagation Area	Aug. 31, 1951
Keller, Jack H., 209 W. Snyder St., Selinsgrove. Entering and hunting Game Propagation Area	Aug. 31, 1951
Kratzer, Mike, Isle of Que, Selinsgrove. Hunting while hunting rights have been denied	Aug. 31, 1952
Krebs, Russel H., 14 S. High St., Selinsgrove. Possessing three rabbits over daily bag limit	Aug. 31, 1951

SOMERSET

Baker, Charles E., R. D. No. 5, Somerset. Assisting to conceal a deer unlawfully taken	Aug. 31, 1951
Brant, Delbert L., R. D. No. 1, Rockwood. Assisting to conceal a deer unlawfully taken	Aug. 31, 1951
Brant, Homer D., R. D. No. 1, Rockwood. Assisting to conceal a deer unlawfully taken	Aug. 31, 1951
Brant, Homer D., 149 East Race St., Somerset. Assisting to conceal deer unlawfully taken	Aug. 31, 1951
Harbaugh, Clair S., Cairnbrook. Using artificial light to take two rabbits	Aug. 31, 1951
Marker, George E., R. D. No. 1, Rockwood. Killing a second deer in one season	Aug. 31, 1951
Shroyer, Fred, Hooversville. Possessing parts of four raccoon taken in close season	Aug. 31, 1951

SUSQUEHANNA

Forsyth, Gordon G., Great Bend. Staking out or setting traps for furbearer other than beaver or otter prior to the opening hour	Aug. 31, 1950
Keech, Harry W., R. D. No. 2, Uniondale. Possessing parts of doe deer in close season	Aug. 31, 1951
Lambertson, Gilbert W., R. D. No. 1, Thompson. Possessing parts of deer during the close season	Aug. 31, 1951
Rudock, William, 25 Church St., Montrose. Assisting in taking a raccoon in close season	Aug. 31, 1951
Sivers, Emerald H., R. D. No. 2, Montrose. Killing one raccoon and two rabbits in close season	Aug. 31, 1951

Stone, Everett D., R. D., Thompson. Hunting while hunting rights have been denied	Aug. 31, 1952
Warner, Harold J., R. D., Unlondale. Killing male deer in close season	Aug. 31, 1951

TIOGA

Cowan, Franklin N., R. D. No. 2, Covington. Possessing a buck deer not legally tagged	Aug. 31, 1951
Holslander, Fred B., Mainsburg. Shooting within 150 yds. of an occupied bldg.	Aug. 31, 1951
Kehyon, Edward, R. D. No. 2, Middlebury Center. Killing a wild rabbit during the close season	Aug. 31, 1951
Lapoint, Charles H., R. D. 1, Knoxville. Attempting to take more than two beaver during season 1949	Aug. 31, 1951
Lapoint, Joseph N., R. D. 2, Middlebury Center. Attempting to take more than two beaver during season 1949 ..	Aug. 31, 1951
McLaughlin, Harold L., Roaring Branch. Possessing deer taken in close season	Aug. 31, 1951
Mattison, Eugene S., R. D. No. 1, Morris. Possessing one raccoon in close season	Aug. 31, 1950
Simcox, Clyde E., R. D. No. 1, Covington. Possessing parts of doe deer taken in close season	Aug. 31, 1951
Starkweather, Hugh H., R. D. No. 4, Wellsboro. Possessing parts of deer in close season	Aug. 31, 1951
White, Jr., Thos., R. D. No. 3, Wellsboro. Killing rabbit in close season	Aug. 31, 1951

UNION

Aikey, Lewis H., R. D. No. 1, Mifflinburg. Possessing doe deer taken in close season	Aug. 31, 1951
Shemory, Harvey W., R. D. No. 1, Mifflinburg. Hunting game between 5:00 p. m. and 7:00 a. m.; killing a ring-neck pheasant hen	Aug. 31, 1951

VENANGO

Loker, Meredith I., R. D. No. 1, Diamond. Destroying one tree on State Game Lands No. 96	Aug. 31, 1951
McCall, Merle C., Jr., Box 258, Rouseville. Destroying one tree on State Game Land No. 96	Aug. 31, 1951
Ritchey, Harold B., R. D. No. 1, Franklin. Killing doe deer in close season	Aug. 31, 1951
Shaffer, Charles E., R. D. No. 2, Cranberry. Hunting two days while hunting rights have been denied	Aug. 31, 1952
Watson, James T., R. D. 1, Emlenton. Killing 2 gray squirrels in close season	Aug. 31, 1951
Wise, George G., R. D. 1, Oil City. Failure to maintain roster of party hunting big game	Aug. 31, 1950

WARREN

Cravener, James H., Tidioute. Possessing parts of a deer in close season	Aug. 31, 1951
Loranger, Joseph A., 17 W. Wayne St., Warren. Attempting to kill ringneck pheasant in close season; shooting within 150 yds. of occupied bldg.	Aug. 31, 1950
Patchey, Kenneth E., 419½ Water St., Warren. Killing bear less than one year old	Aug. 31, 1951
Pellegrino, James P., 12 Schantz St., Warren. Killing male deer not having two points to one antler	Aug. 31, 1951
Proctor, Jr., William L., Box 449, Youngsville. Transporting deer in close season	Aug. 31, 1951
Rodgers, Joseph B., R. D. 1, Akeley. Killing deer in close season	Aug. 31, 1951
Swanson, Glenn L., 13 Glade Ave., Warren. Attempting to kill bear less than one year old	Aug. 31, 1951

WASHINGTON

Lemonakis, Manuel, 503 Blaine Ave., Canonsburg. Shooting within 150 yds. of an occupied bldg.	Aug. 31, 1950
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WAYNE

Cominsky, Felix, Lakewood. Setting more than ten traps for beaver	Aug. 31, 1952
Rasmussen, John T., South Sterling. Possessing parts of deer unlawfully taken	Aug. 31, 1951
Sonsone, Anthony, R. D. No. 4, Honesdale. Possessing six muskrat skins taken in close season	Aug. 31, 1951

WESTMORELAND

Bistel, James, Box 55, Jones Mills. Killing wild turkey in close season; injuring tame turkey	Aug. 31, 1951
Grimm, Robert, Jones Mills. Killing doe deer in close season	Aug. 31, 1951
Lewis, John L., Box 24, Hillside. Possessing doe deer taken in close season	Aug. 31, 1951
Mathias, Robert, 1st St., Ext., Trafford. Possessing parts of wild game in close season	Aug. 31, 1951
Shawley, Lloyd, Box 63, Stahlstown. Killing deer in close season	Aug. 31, 1951
Sokol, Mike, Van Meter. Possessing four muskrats in close season; molesting traps of another	Aug. 31, 1950

WYOMING

Colbenson, Keith, 34 Maple St., Tunkhannock. Possessing part of an unlawfully taken antlerless deer	Aug. 31, 1951
Galloway, Harry (Slim) J., R. D. No. 5, Tunkhannock. Casting an artificial light upon a deer while in possession of a firearm	Aug. 31, 1952
Rosengrant, Arnold D., 56 W. Street, Tunkhannock. Possessing part of an unlawfully killed button buck	Aug. 31, 1951

YORK

Bacon, Robert E., R. D. No. 1, Brogueville. Making a false affidavit in attempting to collect a bounty on 3 gray foxes	Aug. 31, 1951
Kelbaugh, William H., Railroad. Killing bear less than one year old, cub	Aug. 31, 1951
Moxley, Roy E., Delta, R. D. Hunting without nonresident license	Aug. 31, 1951
Runkle, James F., R. D. No. 1, Windsor. Knowingly aiding and assisting in attempting to collect bounty on three gray foxes killed by another person	Aug. 31, 1951
Spoonhour, John F., Jr., York Haven. Hunting game birds in State Propagation Area	Aug. 31, 1951

Strickler, Lavler V., R. D., Delta. Hunting without first securing a nonresident hunting license; giving false information to secure hunting license	Aug. 31, 1951
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NONRESIDENTS

Alu, Charles B., 1024 Chestnut Ave., Trenton, N. J. Possessing parts of game unlawfully taken	Aug. 31, 1951
Bailey, Lawrence F., 29 South Street, Stamford, Conn. Killing a doe deer in close season	Aug. 31, 1951
Bailey, William L., 29 South Street, Stamford, Conn. Assisting to conceal doe deer unlawfully killed	Aug. 31, 1951
Barber, Sr., Watson L., Route 35, Cliftwood, New Jersey. Hunting after license has been seized; failure to maintain complete roster of party hunting big game	Indefinitely
Barton, Stanford C., R. D. No. 2, Shreve, Ohio. Buying dead game animal (deer)	Aug. 31, 1951
Bequeath, Russell H., R. D. No. 1, McDonald, Ohio. Possessing spike buck deer taken in close season	Aug. 31, 1951
Blackford, Marion C., R. D. No. 1, Conover, Ohio. Buying two dead game animals (deer)	Aug. 31, 1951
Blanda, Daniel N., 361 Linnwood St., Brooklyn (8), N. Y. Possession of illegal deer and attempting to transport same out of State	Aug. 31, 1951
Bowman, Kenneth E., R. D. No. 1, Shreve, Ohio. Buying dead game animal (deer)	Aug. 31, 1951
Breschak, John R., Arrel Road, Poland, Ohio. Assisting to conceal game (three deer) unlawfully killed	Aug. 31, 1951
Brown, Alfred A., 3609 Taylor Street, Arlington, Virginia. Hunting without nonresident license	Aug. 31, 1950
Butchko, John, 2286 West Lawn Ave., Warren, Ohio. Hunting without nonresident license	Aug. 31, 1951
Carter, Joseph T., 25 Hamilton Ave., Fairview, N. J. Possessing parts of a deer unlawfully taken; attempting to transport parts of big game animal out of State; hunting without nonresident license; transporting parts of big game unmarked	Aug. 31, 1951
Cary, Charles E., 2116 Hollins St., Baltimore 23, Md. Transporting two rabbits unaccompanied by owner	Aug. 31, 1951
Clyde, Jackson N., 518 6th St., Struthers, Ohio. Possessing three deer in close season	Aug. 31, 1951
Clyde, Samuel H., 473 Maplewood Ave., Struthers, Ohio. Possessing three deer in close season	Aug. 31, 1951
Crouse, Arthur S., Vestel, N. Y. Trapping without nonresident license	Aug. 31, 1951
Dodds, Jess E., 256 Gregory Ave., West Orange, N. J. Hunting deer in an Auxiliary State Game Refuge	Aug. 31, 1951
Eakle, Jr., Joseph F., R. D. No. 5, Hagerstown, Md. Hunting without nonresident license	Aug. 31, 1951
Ebener, Harry J., 101 Wayne Place, Washington, D. C. Hunting without nonresident license	Aug. 31, 1951
Ferrara, Frank, 266 Elton St., Brooklyn 8, N. Y. Aiding in concealing an illegal deer and assisting in attempting to transport it out of State	Aug. 31, 1951
Flickinger, Earl R., R. D. No. 1, Shreve, Ohio. Buying dead game animal (deer)	Aug. 31, 1951
Garman, Merle E., 1311 W. Tusc. St., Canton, Ohio. Killing doe deer in close season	Aug. 31, 1951
Griffith, Edward C., R. D. No. 1, Seymour, Conn. Hunting without nonresident license	Aug. 31, 1951
Hammrich, John C., 66 Grove St., Brooklyn, N. Y. Making false statement to secure hunting license	Aug. 31, 1951
Hirleman, Jay I., R. F. D. No. 1, Thomaston, Conn. Attempting to transport game out of State	Aug. 31, 1950
Hirleman, Thomas J., R. D. No. 1, Thomaston, Conn. Attempting to transport game out of State	Aug. 31, 1950
Hitenberger, George, 1063 Prospect St., Hillside, N. J. Shooting at and wounding a black bear in close season	Aug. 31, 1951
Hogarth, John P., 95 Andros Ave., Mariners Harbor, N. Y. Transporting parts of one antlerless deer taken in close season	Aug. 31, 1951
Hunkle, Lester C., Hancock, Maryland. Hunting without nonresident license	Aug. 31, 1951
Iannantuoni, Carmine M., 34 Chestnut St., Newark, N. J. Attempting to transport parts of deer out of State	Aug. 31, 1951
Johannings, Eberhardt H., Little Falls, N. J. Hunting deer in an Auxiliary State Game Refuge	Aug. 31, 1951
Judy, James W., R. D. No. 1, Burgh Hill, Ohio. Giving false information to secure hunting license; non-resident hunting without license	Aug. 31, 1951
Karnes, Paul J., Shore Road, Rio Grand, N. J. Hunting without nonresident license; hunting game animals, groundhog, on Sunday; hunting game, groundhog, with automatic rifle	Aug. 31, 1951
King, John L., 1751 Galem, S. E., Washington, D. C. Possessing parts of deer unlawfully taken	Aug. 31, 1951
Kitch, Joseph M., 635 Colorado Ave., Baltimore 10, Md. Hunting without nonresident license	Aug. 31, 1951
Kolb, Maurice J., Dundalk, Md. Hunting without nonresident license	Aug. 31, 1951
Kreger, Paul O., R. D. No. 1, Wooster, Ohio. Buying dead game animal	Aug. 31, 1951
Kriel, Michael, 3116 32nd St., Astoria, N. Y. Hunting for deer with use of artificial light	Aug. 31, 1951
LaBash, A. W., 1541 E. 38th St., Cleveland, Ohio. Hunting without nonresident license	Aug. 31, 1951
Leetz, George A., Jr., 3124 W. 103rd St., Cleveland, Ohio. Killing deer with automatic firearm	Aug. 31, 1951
Lemke, William C., 34 Jersey St., Trenton, N. J. Hunting without nonresident license	Aug. 31, 1951
Link, Jr., Robert U., 831 E. Coldspring Lane, Baltimore 12, Md. Hunting without nonresident license	Aug. 31, 1950
Lope, Louis E., 261 W. 22nd St., New York City, N. Y. Possessing parts of deer killed by use of artificial light ..	Aug. 31, 1951
Luscia, Guido, Skillman Rd., Skillman, N. J. Transporting unlawfully killed button buck	Aug. 31, 1951
Madden, Daniel J., 413 E. 142nd St., Bronx, New York City. Possessing illegally killed deer in close season; and transporting illegally killed deer out of State	Aug. 31, 1951
Martin, George A., R. D. No. 10, Baltimore, Md. Hunting without resident license	Aug. 31, 1951
Mason, Louis J., Allentown Rd., Yardville, N. J. Hunting without nonresident license	Aug. 31, 1951
Meizinger, Marty J., 231 Woodland Rd., New Milford, N. J. Attempting to take deer in close season; throwing artificial light on deer while in possession of a rifle	Aug. 31, 1950
Milak, Arthur G., State Farm Road, Bordentown, N. J. Attempting to kill a second deer in one season	Aug. 31, 1950

Monell, Suzanne, Mrs., Welch Rd., Essex Falls, N. J. Hunting one day without nonresident hunting license	Aug. 31, 1950	Shipley, Ralph G., R. D. No. 2, Baltimore Pike, Cumberland, Md. Hunting without nonresident license	Aug. 31, 1951
Monell, Jr., Theodore, Welch Rd., Essex Falls, N. J. Hunting one day without nonresident license; transporting two grouse out of State illegally	Aug. 31, 1950	Simpson, Jr., John H., 414 N. 10th St., Olena, N. Y. Attempting to kill a big game animal, namely a buck deer in close season	Aug. 31, 1951
Moore, Edward R., Shoreham, Long Island, New York. Hunting without nonresident license	Aug. 31, 1950	Smith, Alvin L., 1755 Galen S. E., Washington, D. C. Possessing parts of deer unlawfully taken	Aug. 31, 1951
Moore, John H. C., 2713 Parkway, Baltimore 14, Md. Hunting without nonresident license; giving false information in securing license	Aug. 31, 1951	Smith, Mervin F., R. D. No. 2, Cutler, Ill. Failure to tag deer one hour after killing	Aug. 31, 1951
Petena, Edward J., R. D. No. 1, Narrowsburg, N. Y. Killing one deer by use of artificial light	Aug. 31, 1951	Soptelean, Ted, 2344 8th N. E., Canton, Ohio. Hunting without nonresident license	Aug. 31, 1951
Pentronchak, Jr., Wassail, 552 Guthell Place, Lyndhurst, N. J. Killing spike buck	Aug. 31, 1950	Sotkovski, Albert, 517 Liberty St., Hubbard, Ohio. Assisting to conceal game unlawfully killed	Aug. 31, 1951
Pitzer, Theodor R., R. D. No. 1, Dixon, Ill. Assisting in concealing doe deer illegally killed	Aug. 31, 1951	Stevens, Clifford A., 39 Grant St., Oakdale, Union, N. Y. Hunting without nonresident license	Aug. 31, 1951
Probst, Eugene R., R. F. D. No. 2, Bel Air, Md. Hunting without nonresident license	Aug. 31, 1951	Stewart, Keith K., 1226 Deutz Ave., Trenton, N. J. Hunting without nonresident license	Aug. 31, 1951
Quaker, John W., Manhattan Beach, Severna Park, Md. Hunting one day without nonresident license	Aug. 31, 1951	Stotler, Robert F., Box 175, Hancock, Maryland. Hunting without nonresident license	Aug. 31, 1951
Reed, Ruben D., R. D. No. 2, Newark, Del. Hunting without nonresident license	Aug. 31, 1951	Sullivan, Patrick M., 411 E. 142nd St., Bronx, New York City. Killing deer in close season; using gun propelling more than one ball at a single discharge	Aug. 31, 1951
Reed, William J., R. D. No. 2, Newark, Del. Hunting without nonresident license	Aug. 31, 1951	Thomason, Wm. C., 507 Holstein Ave., Tacoma Park, Md. Hunting without nonresident license	Aug. 31, 1951
Revele, William S., 112 Market St., Wilmington, Del. Hunting without nonresident license	Aug. 31, 1951	Tohlman, Michael J., 149 W. Grant St., Elizabeth, N. J. Hunting without nonresident license	Aug. 31, 1950
Ryan, Joseph W., 6003 Lawrence St., Flushing, N. Y. Hunting without nonresident license; possessing loaded shotgun in vehicle in motion on highway	Aug. 31, 1950	Turner, John, 207 Lafayette St., Bordentown, N. J. Hunting without nonresident license	Aug. 31, 1951
Ryan, Lawrence, 3535 75th St., Jackson Heights, Long Island, N. Y. Hunting without nonresident license; possessing parts of deer unlawfully taken; attempting to transport parts of deer out of State	Aug. 31, 1951	Walters, Charles E., Belair, Md. Hunting without nonresident license	Aug. 31, 1951
Safka, William A., 5600 Green Hill Ave., Baltimore 6, Md. Hunting without nonresident license	Aug. 31, 1950	Watson, Walter H., R. D. No. 1, Hockessin, Del. Hunting without a nonresident license	Aug. 31, 1951
Salb, George J., 544 Lambertown St., Trenton, N. J. Hunting without nonresident license	Aug. 31, 1951	Welker, Charles A., Jr., 1914 Willow Spring, Baltimore, Md. Hunting without nonresident license	Aug. 31, 1951
Shaefer, C. F., Claymont Garden Apts., Claymont, Del. Hunting without nonresident license; giving false information in securing license	Aug. 31, 1951	Wenck, Kenneth G., 2606 Hamilton Ave., Baltimore 14, Md. Hunting without nonresident license	Aug. 31, 1950
Shaffer, Jr., Durwood H., 47 Thomas St., Newark, N. J. Hunting without nonresident license	Aug. 31, 1951	Weyandt, Paul E., 1208 Colonial Ave., Alexandria, Va. Hunting without nonresident license	Aug. 31, 1950
Shaffer, Sr., Durwood H., 722 Bergen St., Newark, N. J. Hunting without nonresident license	Aug. 31, 1951	Whitt, Calvin W., Rising Sun, Md. Hunting without nonresident license	Aug. 31, 1951
Shaffer, Kermit A., 47 Thomas St., Newark, N. J. Hunting without nonresident license	Aug. 31, 1951	Whitt, Charles N., Rising Sun, Md. Hunting without nonresident license	Aug. 31, 1951
		Zawadsky, Nicholas, Edgewood, Md. Hunting without nonresident license; transporting game, pheasants unlawfully killed	Aug. 31, 1950
		Zawadsky, Wesley N., Edgewood, Md. Hunting without nonresident license; possessing two hen pheasants and possessing two cock pheasants unlawfully killed	Aug. 31, 1950

GUN DOG HANDLING—from Page 18

Avoid restlessness and excitement because that only causes confusion, and confusion has no place in the hunting field.

Whistle signals are excellent to use for the gun dog. Use a prolonged whistle to bring him in and a short, sharp note to let him know where you are. The sharp, short double note is to send him on wider than he is already working. Drill the dog on these signals because they will save wear on your vocal chords, they will not disturb game, and the dog can hear them at a greater distance.

When hunting, keep silent until you have a definite reason to give a command, and always make sure it is obeyed, then your dog will have the proper amount of respect for you. Avoid punishment while you are hunting, if at all possible, but do not allow him to deliberately err and get away with it.

Hunt naturally and with ease and allow the dog to perform in the same manner. Work together as a team and your hunting days will be completely filled with superlative pleasures!

OUTDOOR KIDS—from Page 6

"Well, why are the groundhogs digging them?" Jane asked, still quite puzzled over her discovery.

"That's the same question I asked Pop on Groundhog Day last February 2, so I'll tell you what he told me," Billy began.

"Groundhogs spend the winter sleeping in their burrows. It is called hibernation and quite a few of our animals sleep in the winter. The big black bear is another one. Anyhow, Pop said that each groundhog likes a burrow of its own. In the summer, when the young ones that are born in the burrows are about six weeks old, they leave their home and strike out for themselves," Billy told his sister.

"Oh, I'll bet I know what happens then," Jane cried, "if each groundhog likes a den of its own then each little groundhog has to dig his own. Is that right?" Jane asked.

"That's it," Billy admitted. "And when the young groundhogs are all on their own early in the summer, we can find many, many freshly dug holes. Not all of them will serve as winter quarters, for some of the groundhogs will be shot during the hunting season late in the summer. But you know what pop said about that? He said that all those unused holes make great burrows for rabbits and other animals that can't dig them like groundhogs. They won't go to waste, he said."

"When do the groundhogs go to sleep, when it snows?" Jane asked.

"No, they go to bed early," Billy told her. "That's a funny thing, Pop said, for the groundhogs settle down for the winter long before their food supply is gone. They begin to get drowsy in the fall and by the time the first snow falls, they are sound asleep deep in their dens."

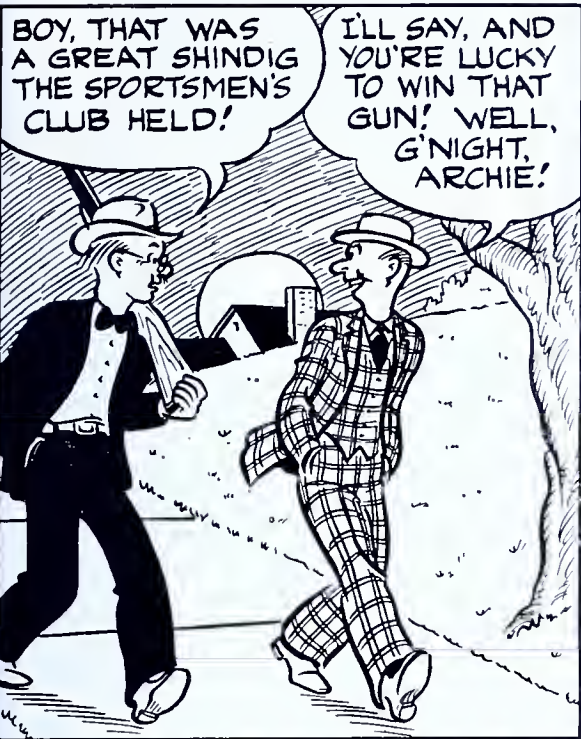
"Gee, I would think they would be afraid of getting trapped in those burrows," Jane ventured.

"Oh, they are smarter than that," Billy answered. "Those burrows have many different branches running underground, and not only that, there are a few holes carefully hidden around the field where you can't see them. Those are the escape holes, and those are the ones that sometimes cause cows or horses to fall and break their legs."

"How can we see one of these groundhogs?" Jane asked.

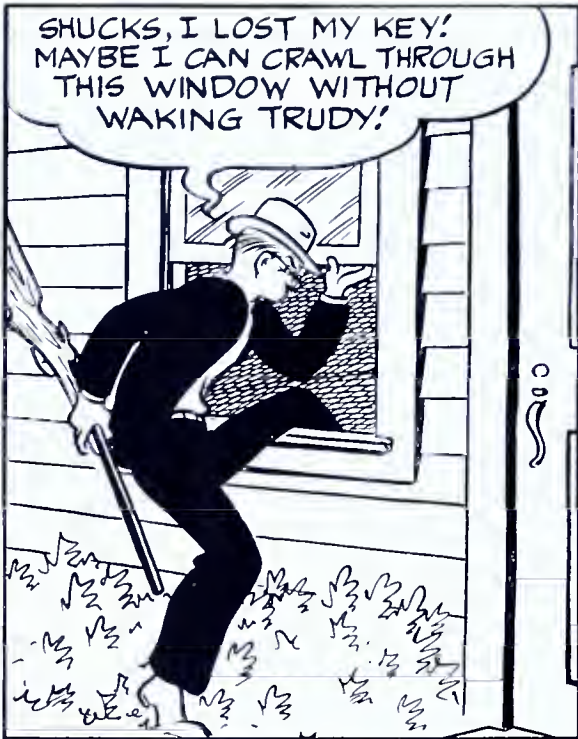
"I'll tell you what we'll do," Billy suggested. "We'll get Pop to bring us over here some evening and we'll hide. When the groundhogs come out to feed, we can watch them. Pop says he can make them sit up and look around by whistling at them."

"That will be fun," Jane cried, as she and Billy and Pal set out across the field toward home.



BOY, THAT WAS A GREAT SHINDIG THE SPORTSMEN'S CLUB HELD!

I'LL SAY, AND YOU'RE LUCKY TO WIN THAT GUN! WELL, G'NIGHT, ARCHIE!



SHUCKS, I LOST MY KEY! MAYBE I CAN CRAWL THROUGH THIS WINDOW WITHOUT WAKING TRUDY!



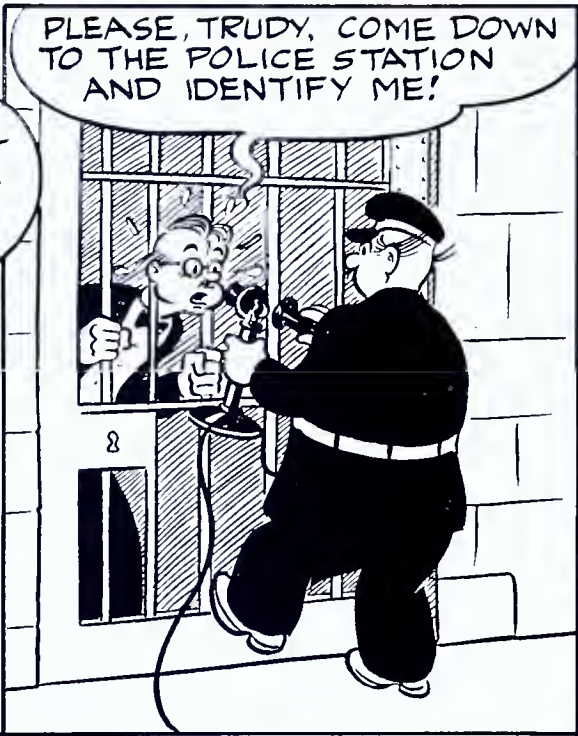
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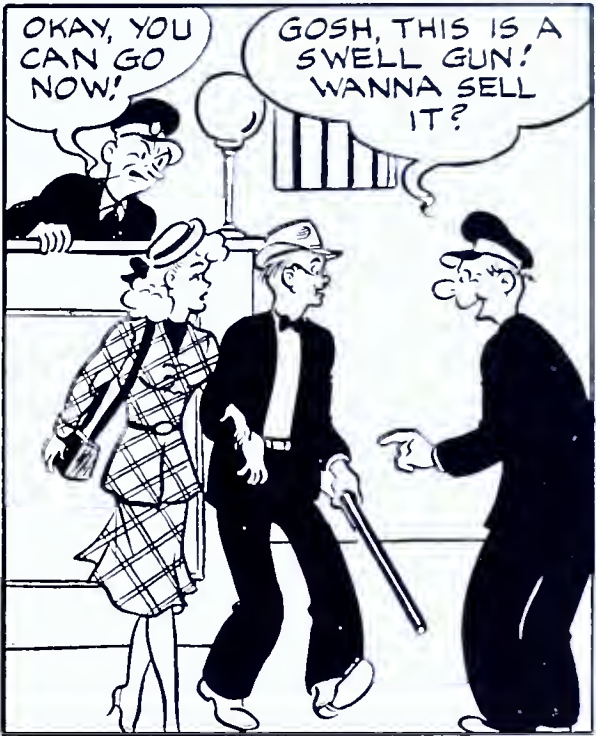
THIS IS A DESPERATE CHARACTER, DAN... CARRYING A GUN AND BREAKING INTO A HOUSE!

BUT, OFFICER...

SHUT UP! YOU'LL GET 50 YEARS FOR THIS!



PLEASE, TRUDY, COME DOWN TO THE POLICE STATION AND IDENTIFY ME!



OKAY, YOU CAN GO NOW!

GOSH, THIS IS A SWELL GUN! WANNA SELL IT?



NOPE! I...

OF COURSE HE'LL SELL IT... IT'S CAUSED ENOUGH TROUBLE ALREADY!



THIS HAS ME SO UPSET... YOU CAN PAY ME FOR THE GUN AND I'LL BUY A NEW DRESS TO SOOTHE MY NERVES!

BUT...

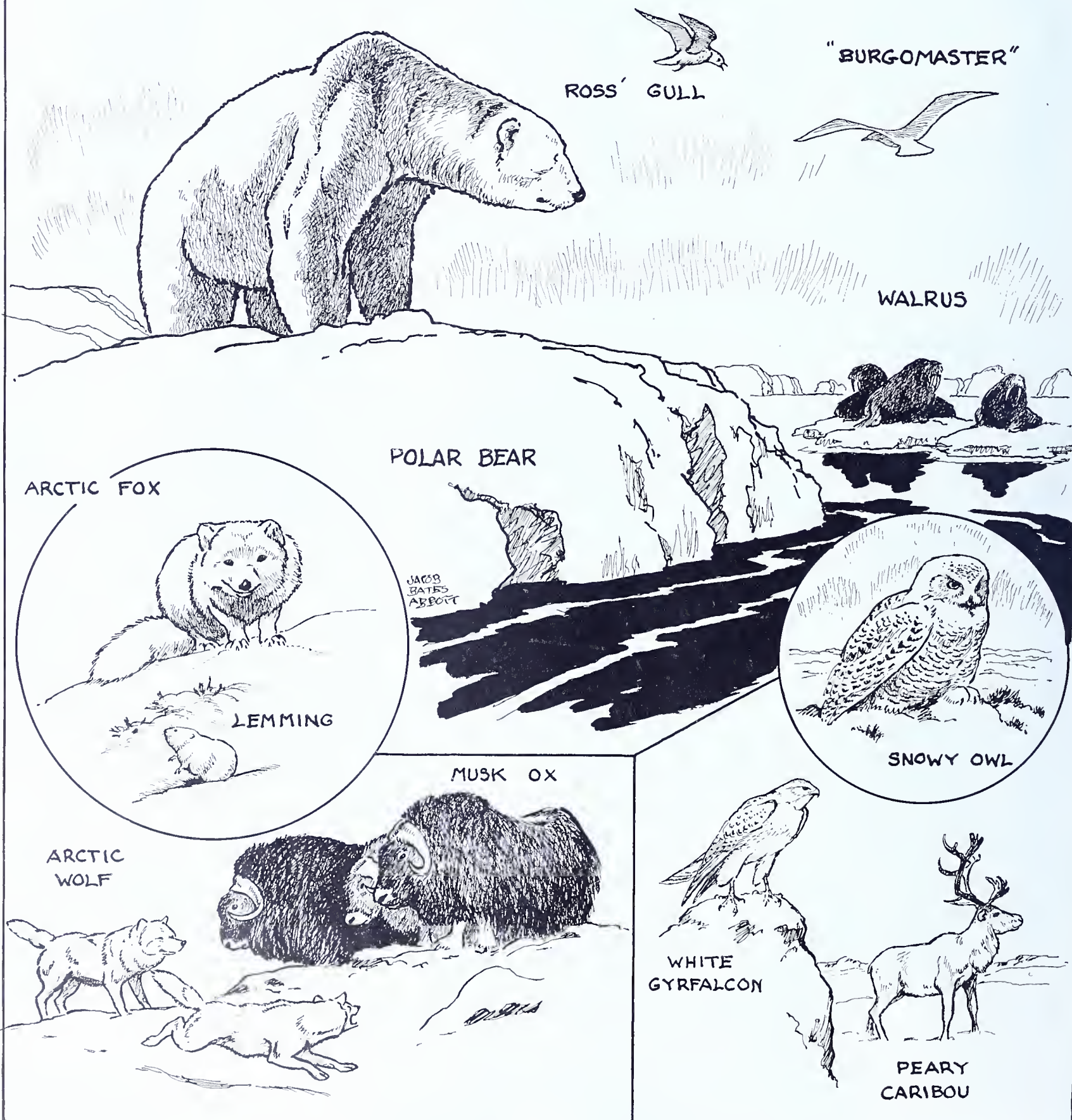
GEE! SOUNDS LIKE MY WIFE!



ARCHIE! GO TO SLEEP AND STOP MUMBLING! MOST HUSBANDS LIKE TO SEE THEIR WIVES DRESSED NICELY!

FARTHEST NORTH AMERICANS.

ANIMALS AND BIRDS WHO SPEND MOST OF THEIR LIVES IN THE ARCTIC WASTES, WHOSE COLOR TAKES ON THE ICE KING'S PALLOR AND WHO SELDOM SEE NIGHT, WHITE MEN OR TREES.



PENNSYLVANIA Game News



JACOB
BATES
ABBOT
1911

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"Woodchuck"

by

Jacob Bates Abbott

WHICH IS A WOODCHUCK?



This is the time of year when human beings apparently resemble woodchucks! That's what many chuck hunters tell us.

Woodchuck hunting should provide fine shooting, great off-season sport, and a wealth of outdoor recreation. Instead, woodchuck hunting in Pennsylvania during recent years has been a very dangerous pastime. In the last three years fifteen people have been killed and fifty-eight others seriously shot while hunting the "whistle-pig."

In this type of hunting, sudden death to the "chucks" is to be expected. Sudden death to the hunter is plain criminal. Chucks are exceedingly wary animals and they can appear from or disappear into their burrows with the speed of a photoflash. Hunting them, therefore, becomes a process of careful stalking or patient waiting. It is an art and a skill that should be one of the safest forms of recreation. Yet even a glance at the records will prove that, compared to other types of hunting, chuck chasers are risking their own lives in being mistaken for the woodchuck.

Evidently, pride in shooting prowess, sometimes combined with poor eyesight or downright selfishness, produces hunting accidents—accidents without reason. Maybe to some, the hatless head of a man appearing over the brow of a hill looks like an animal and the long wait for the quarry to appear is inducive to anxiousness in the hunter. But there is no excuse for shooting at an indistinct and uncertain target.

Furthermore, what prompts some woodchuck hunters to go hatless afield? Why the average August hunter fails to distinguish himself by wearing a red cap, a red shirt or even a red bandana while later season hunters welcome the opportunity of covering themselves with all shades of bright red haberdashery isn't easily understood. Especially is this amazing when the record shows that the pheasant hunter, the rabbit chaser, or the deer stalker is the safer by far because he takes these precautions.

The woodchuck hunter should wear red, particularly on the head. He should not sit obscured in cover. He should be sure of his target. He must stay that impulse to shoot until he is certain of his quarry.

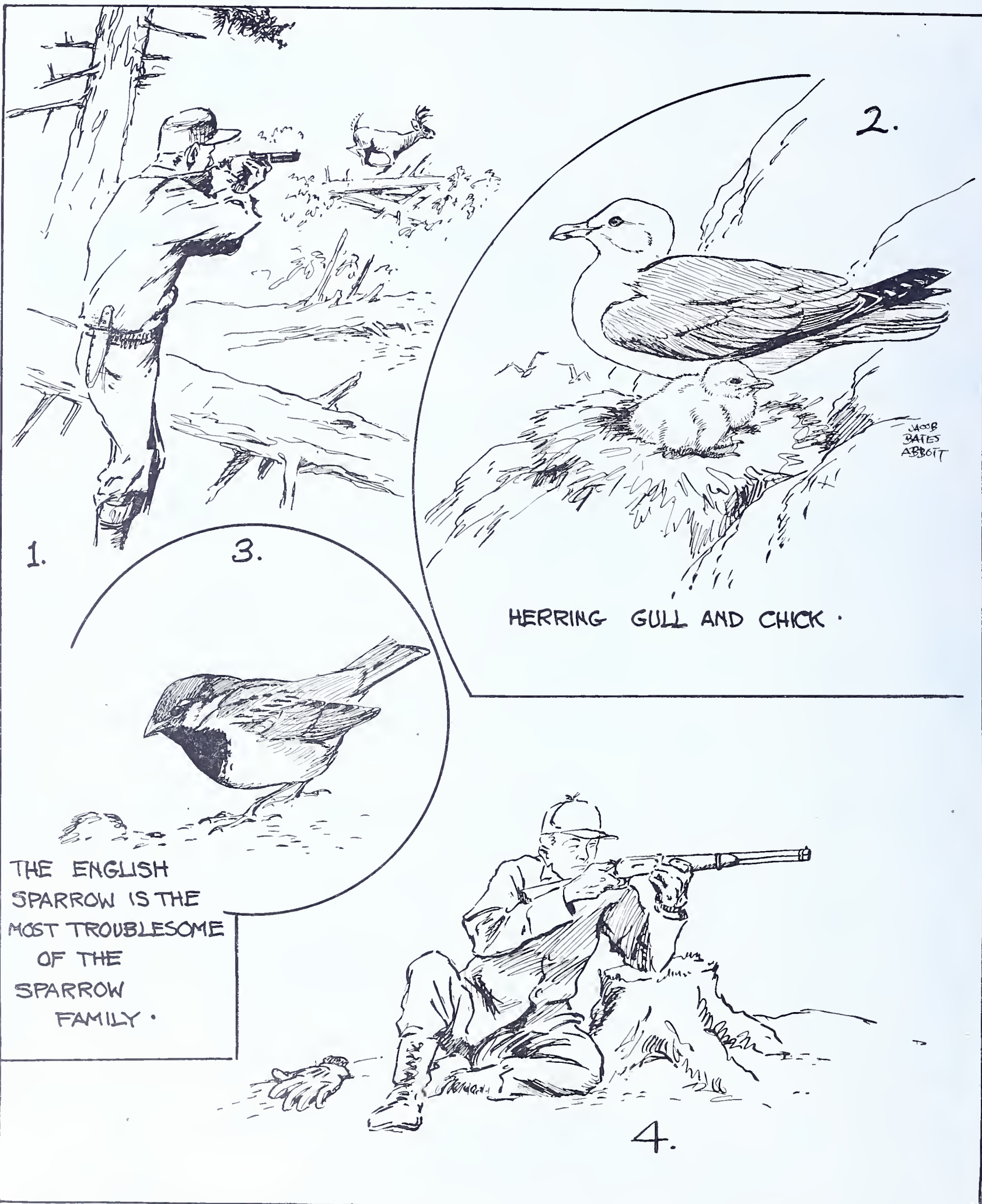
But the records prove he doesn't.

Perhaps that is why a human resembles a woodchuck.

As a woodchuck hunter, what are you going to do about it? Wear red or bare head? Be sure and be safe or just shoot and be sorry?

WELL, WHAT'S WRONG?

Answers on Page 20



Soil Conservation Districts— The Answer To Better Farm Game Cover

by
Frank C. Edminster

CONSERVATIONISTS have two big problems: what to do; and how to get it done. Those interested in game and fish conservation face these questions probably with greater uncertainty than others. Soil and forest conservationists are at least dealing with the primary assets and crops of farm and wooded land; the wildlifer is concerned almost entirely with by-products—a resource that is there not so much because of man's deliberate efforts to grow it but rather as a happenstance. Too often the wildlife crop exists *in spite of* the methods of land culture. By the same token, great crops of quail, rabbits, pheasants and other game that *might* be grown, but aren't, are missing because of man's unconcern with their welfare.

Thus the challenge to the game conservationists is a tough one, though it has its compensations. Their cause is far from hopeless. If the majority of landowners give wildlife scant thought, it is also true that there is another large group of citizens—sportsmen and nature enthusiasts—who more than make up for this lethargy with their enthusiasm for wildlife. Then too, many farmers are really interested in wildlife but have not realized how it is being hurt by exploitive land use practices. Most country people—even those who presently show no concern for wildlife—possess the natural traits that can develop a conservationist philosophy when in a suitable atmosphere. Our big job then may well be described as making 5,800,000 conservation farmers out of the 5,800,000 farmers in this country.

That's quite a job! It involves a major overhauling of our nearly six million farms and ranches in the United States, 171,000 in Pennsylvania. Knowing *what* to include in this overhaul is problem number one. Most of our farms and forests have been badly exploited over the years. This said story of land misuse is not wholly the result of wilful malpractice for quick money. To a considerable extent it came about from transplanting a European system of farming into a new area whose soil-climate complex was vastly different. The methods of growing crops that had been followed in western Europe for centuries without serious soil erosion or depletion did not prove as conservative here.

These methods have cost us countless millions of tons of our fertile topsoil, yet by and large these methods continue in use today. And that fact leads us to the second—and far more difficult—problem. After we know what we want to do, *how* will we get it accomplished? That is problem number two and by far the bigger one of the pair.

Good Habitat is Essential for Game Abundance

It is generally conceded now that improved habitat is the basic need if we are to have better hunting and fishing. This in no way belittles the other phases of game management. There is a continuing need for sound conservation laws and their enforcement. There is also a place in the future conservation picture for those old gimmicks of game and fish stocking, refuges, and others. The fundamental fact is, however, that it takes good cover and good water to grow large crops of game and fish. The land must be able to grow them and support them before any other management is possible.

Taking the two problems in order, let us first see what sort of a habitat development program we really want in Pennsylvania. What are the principles on which we may base such a program and reasonably expect it to succeed—succeed both in producing good habitat and being acceptable to the landowners. It seems to me that the first fact we must face is that the wildlife crop is a *by-product* of the two enterprises: farming and lumbering. The exception to this is the group of aquatic animals—fish, waterfowl, muskrats and some others—that live in water and marsh areas. They grow on truly wildlife lands—where game and fish are often the major crop. Except for these kinds wildlife is of necessity a secondary crop. The first principle that must guide us therefore is that our habitat improvement must be compatible with the main cropland, pasture, and woodland needs of each farm. There is no use asking the farmer to “set aside” some of his best cropland for wildlife. After all, that is where he makes his living. He's not apt to be very philanthropic about wildlife any more than the average sportsman is going to volunteer a cut out of his paycheck for a farmer's benefit program. Our recom-



Living fences of multiflora rose provide excellent game cover as travel lanes across open fields where secure shelter is most needed by pheasants, rabbits and other game. USCS Photo



USCS Photo
Above: A woodland-field border planted with bicolor lespedeza. This plant furnishes superior food and cover for bobwhite quail and cottontails. It matures seed crops only as far north as southern Pennsylvania although varieties are being developed that will be useful farther north.

Below: Farm ponds attract wild waterfowl and help to distribute duck hunting widely. Pennsylvania needs 125,000 new farm ponds according to recent estimates by the Soil Conservation Service. USCS Photo



mendations must be sound agriculturally for the farmer is the fellow who must develop them and live with them.

It is a matter of great good fortune that sound conservation farming and good wood harvest practices are generally consistent with having productive wildlife habitat. Most of our farms have a variety of soils and topography. These have different capabilities for use and hence encourage a number of different farming enterprises rather than a single land use. Sound land use for every acre of every farm will be the cornerstone of our habitat development plans. The fields having the highest natural use capability will grow the tilled crops. Those that would be damaged by erosion if tilled but which can grow good grass will become the pastures. Areas not adapted to either crops or grass will be devoted to woods if on dry sites. Others on wet spots or too small to make a woods should be made into wildlife areas for that is their best use. By using every acre according to its inherent capability we get the best distribution of different kinds of land cover that sound use alone provides. A physical inventory of the kinds of land in terms of soils, topography, erosion and present land use, all shown on an aerial photograph, provide the data that we may interpret to give us the land use capabilities. It takes a trained conservation surveyor to get this factual background. Having it to guide us in setting up a pattern of sound land use is our second cardinal principle.

Having established the *limits* of use of the land consistent with sustained production, we next work out the *actual* use of each parcel so as to provide the necessary crops for the individual farm business. The kinds and amounts of crops and livestock—including the hay and pasture requirements of the animals—are figured out between the conservationist and the farmer. Insofar as possible these requirements are met by placing the various land uses in areas physically adapted to them. It may well be that some fields that *could* be used for tilled crops may not be needed for this use but will be used as pasture instead. Similarly, some areas may be used for woods that are capable of a more intensive use, provided this makes the best balance for the farm business. Many times small areas of good land will be developed for wildlife cover because they are in odd locations with respect to the field pattern, or are not needed for other purposes. In any case, all parts of the farm will be used so as to fit soundly into the needs of the farm business—our third principle to follow.

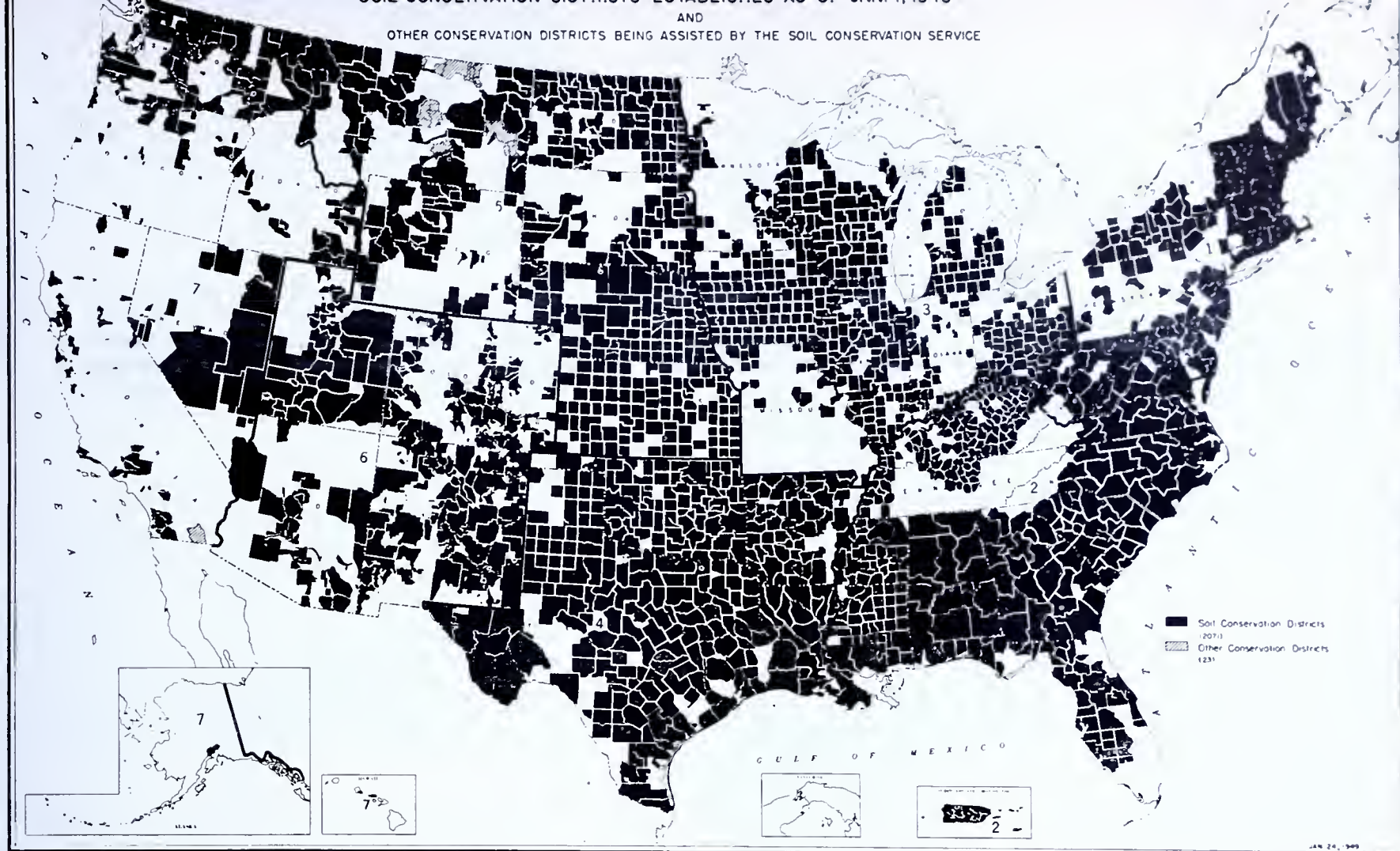
Conservation Practices Supplement Good Land Use

Conservation practices, the plants used in many of them, and the techniques for developing them should all be beneficial to the farm and to the farmer. They must make each land use productive and be such that the farmer can and will establish and operate them. They must become a part of his permanent way of farming. They should not be obnoxious in any way and must be profitable to him, although not necessarily in a monetary sense.

Practices such as contour strip cropping, terracing, woodland protection, cover crops, windbreaks, new ponds, managed hedges, conservative crop rotations, shrub borders along the woodland edges, and many others will be used to conserve soil and water and make each land use productive of its major crop and also of its by-product of wildlife. Wherever possible, plants used will be of the greatest benefit to wildlife, as multiflora rose for hedges and bicolor lespedeza for shrub borders. These and other suitable plants will be used to provide cover wherever they fit into a conservation practice, as in windbreaks, on stream banks—in short, at every place where good land use makes an opportunity.

The design of many conservation structures can be made to favor wildlife, as with ponds. If fish are to be the major wildlife use the design will provide for deep water without shallows, adequate area, and little water loss. On the other hand, if ducks and muskrats are more important the design will be made to give extensive shallows, water level control, a larger area but with less concern for lost water.

Summarizing point five, it is to offer the landowner a profitable selection of practices, plants and techniques that will implement each land use, make his farm a better farm, and come as near as possible to developing an ideal pattern of good wildlife cover. In doing this the entire farm will be covered since it is the unit of farm business. All parts of the farm are inter-related so that only a *complete* farm conservation plan offers a means of getting sound soil and wildlife conservation.



More than 2100 soil conservation districts have been created in the 48 states since 1937. They include within their boundaries more than three-fourths of all our farms and ranches. In Pennsylvania, only 23 counties and parts of two others have up to now organized as soil conservation districts under the Pennsylvania district law. USCS Photo

What we want to do in a program of farm wildlife habitat development is:

- 1) Have every part of the farm in a type of use that conserves soil and water and maintains its productivity forever.
- 2) Implement each land use with all the sound conservation practices, good plants, and practical development techniques that fit each area.
- 3) Base these developments on the facts revealed by a physical inventory of the land resources of the farm.
- 4) Be sure that all recommendations fit sensibly into the farming enterprise—that is, they are economically right. And
- 5) Recognize that on most lands the wildlife crop is a by-product and hence will get secondary consideration. A theoretically perfect game cover pattern is seldom possible.

Conservation Needs in Pennsylvania are Tremendous

Such a program as outlined is no small task. It must be tailored to fit each farm on many different kinds of lands. Once planned the far greater job still remains—how to get it done. If it is ever to accomplish its objective—making the lands of Pennsylvania permanently productive of all renewable resources—it must be efficient. There are 171,000 farms and farmers to deal with on 14 million acres of land. On that land the Soil Conservation Service estimates there is needed some 125,000 ponds, nearly 58,000 miles of managed hedges, over 170,000 acres of shrub borders between fields and woods, and about 46,000 miles of streambank revegetation. In the ponds there will be need for stocking nearly 100 million fish. The nurseries—private, state and federal—will have to grow nearly two billion shrubs and many more trees than that to do the planting work. These are just a few of the needs that relate directly to the wildlife habitat improvement practices. Other work on crop fields, pastures and woodlands is far greater in scope, for the wildlife cover portion of the whole job is naturally a small share of the whole. Most of these other practices contribute very materially to wildlife environment, some of them to even a greater degree than the so-called wildlife practices themselves.

Soil Conservation Districts Pioneered in Pennsylvania

Much study was given to the problem of organizing for this job a little over a decade ago. It was apparent that there would need to be grass roots organizations of landowners with which the professional conservation agencies could work. Out of these studies came the proposal for "soil conservation districts" and a

suggested draft of legislation for consideration by the states. This so-called "Standard Soil Conservation Districts Law" was enacted in substantially the recommended form by about half of the states between 1937 and 1940. Pennsylvania was among the first states to pass such a soil conservation law, Public Law 2724 of July 2, 1937. This law was replaced by General Assembly No. 217 in 1945 which is the statute under which the soil conservation districts in Pennsylvania now function. It is well that all Pennsylvanians who are concerned about conservation be acquainted with this law for it is of great importance to their interests.

Under Section 2, Declaration of Policy, it says "It is hereby declared to be the policy of the Commonwealth to provide for the conservation of the soil and soil resources of this Commonwealth . . . and thereby to preserve natural resources; assist in the control of floods; prevent impairment of dams and reservoirs . . . preserve wildlife . . . protect public lands; and protect and promote . . . the general welfare of the people . . ." It then goes on to implement this policy by creating a "State Soil Conservation Commission" in the State Department of Agriculture, a commission now headed by the Honorable Miles Horst, Secretary of Agriculture. Other members of the Commission are the Secretary of Forests and Waters, the Dean of the School of Agriculture of the Pennsylvania State College, and three farmers appointed by the Governor. Among the duties of the Commission is the approval and coordination of the programs of soil conservation districts, the securing of assistance for the districts from governmental agencies, and the apportionment among the districts of state or federal funds.

The districts under Pennsylvania's law are created on county boundaries. "When the board of county commissioners of any county shall determine . . . that conservation of soil resources . . . are problems of public concern in the county, and that a substantial proportion of the rural landowners of the county favor such a resolution, it shall be lawful for the said board of county commissioners . . . to declare the county to be a soil conservation district . . . These determinations may be made through petitions, hearings, referenda or by any other means which the board . . . deems appropriate."

When this democratic process has resulted in declaring a county to be a soil conservation district, it constitutes ". . . a public body corporate and politic exercising public powers of the Commonwealth as an agency thereof." The next step in getting the district functioning is the designation of the five District Directors

who constitute its board of directors. They are appointed by the county commissioners, one from among their own members and four practical farmers. These five men run the affairs of the district. They are given wide authorities by the law to engage in conservation work. These authorities include: conducting of surveys, investigations, and research into the nature of soil erosion and preventive control measures in cooperation with other research agencies of the state; to carry out soil conservation practices on public or private lands in cooperation with the administrators or owners thereof; entering into agreements with and giving assistance to any agency or landowner in conserving or effectively utilizing lands within the district; making available to landowners materials and equipment needed for conservation work on mutually agreeable terms; developing comprehensive plans for the conservation of the soil resources of the district and publishing such plans; acceptance of contributions, acquiring land or other property and employing personnel; the right to sue and be sued. They do not have the power of taxation. All of their work must be on a voluntary basis but they may require as a condition of cooperation that the land occupier agree "... as to the long term use of such lands as will tend to prevent or control erosion thereon."

Development of Conservation Districts a Boon to Wildlife

That is a quick summary of the Pennsylvania law under which 23 counties and portions of 2 other counties are now operating as soil conservation districts. Other state soil conservation district laws vary from Pennsylvania's in many ways but all have essentially the same objectives and manner of operating. Over 2100 soil conservation districts, including within their boundaries about three-fourths of all our farms, are now organized in the United States. When you consider that this tremendous development has taken place within a mere twelve years, it is obvious that there has been great public interest in it. Sociologists, economists and conservationists who have studied the growth of the soil con-

servation districts movement have credited it with being of great significance to this country. Mr. Ward Shepard in his book "Food or Famine" calls the great American soil conservation experiment "... the most important revolution in agriculture since primitive man domesticated the food plants." In a recent editorial, the *Country Gentleman* said that "... the independent, farmer-controlled soil conservation districts ... are the soundest and most democratic means of carrying out a conservation program."

The soil conservation districts are as vital to game management in its sphere of conservation work as they are to the broader field of soil conservation. Ever since the importance of habitat development was recognized as the keystone to more game the crying need has been for a practical medium for the professional game manager and farmer to get together to accomplish this work. Efforts at developing farmer-sportsman game cooperatives have generally failed to provide any real habitat improvement—in fact, have almost always succumbed to excessive organizational costs. The soil conservation district spreads the overhead costs over all of their resource conservation work. Thus agencies aiding the districts with wildlife work can concentrate on actual cover development. The growth of state game department aid to soil conservation districts in the last three years attests to the practicality of this system. At least 30 state game outfits are now carrying on a habitat program in cooperation with these conservation districts, most of it being financed by Pittman-Robertson federal aid projects. Many of these programs are comprehensive, covering the entire state with available facilities for wildlife aid. The Pennsylvania Game Commission is carrying out part of its farm game program through some of the Pennsylvania soil conservation districts.

Let us take a typical example to illustrate how the teamwork of several conservation agencies working with a soil conservation

(Continued on Page 30)

Conservation planning on farms is based on the natural capabilities of the land for different uses. Proper land use must be arranged for each piece of land to assure its permanent productivity.

USCS Photo



LAND CAPABILITY CLASSES			
SUITABLE FOR CULTIVATION		NO CULTIVATION—PASTURE, HAY, WOODLAND AND WILDLIFE	
I	REQUIRES GOOD SOIL MANAGEMENT PRACTICES ONLY	V	NO RESTRICTIONS IN USE
II	MODERATE CONSERVATION PRACTICES NECESSARY	VI	MODERATE RESTRICTIONS IN USE
III	INTENSIVE CONSERVATION PRACTICES NECESSARY	VII	SEVERE RESTRICTIONS IN USE
IV	PERENNIAL VEGETATION—INFREQUENT CULTIVATION	VIII	BEST SUITED FOR WILDLIFE AND RECREATION

R2-127



OUTDOOR KIDS

By HAL HARRISON



BILLY and Jane had gone with their mother and father to fish at the lake. In the afternoon, while Pop took a snooze under a shady tree, and while Mom became deeply interested in a book, the children wandered away to explore a marshy region nearby.

They admired the beauty of tree swallows skimming across the water. Billy found a muskrat house and they waded across a little pond to stand on top of it. Dragonflies with their brightly colored wings and bodies made Jane exclaim "Aren't they beautiful!"

Finally they came to the edge of a very dense marsh where the plants grew high and thick and where tangles of swamp rose and willow and alder made it almost impossible to go through. It was here that Jane discovered a raft of big green leaves, apart from the rest of the plants, but growing in the water about twenty feet from the edge.

"Oh, look, Billy, there are big yellow flowers growing under those leaves, and I see two that are above the leaves. They look like yellow tulips on their long green stems," Jane observed.

"Well, they aren't tulips, I can tell you that," said Billy with that air of authority that he always assumed around his sister when he was pretty sure that he knew

the answer to the question at hand. "Those are water lilies," he added.

"Ho, ho, listen to that," scoffed Jane, "anybody knows that water lilies are white and float on the top of the water."

"You're talking about white water lilies," Billy insisted. "These are yellow water lilies and they are called spatterdock. Let's see if we can wade out to them."

At first the children sank deep in the mire, but by picking their way across the tops of hummocks, they succeeded in reaching the yellow flowers.

The children bent low to look into the blossoms.

"Gee whiz, they don't smell very good, do they?" Jane declared.

"Compared to the white water lily, I'll say they don't," Billy agreed.

"Feel how rubbery this stem is. And look, Billy, the flower is not all yellow, either. The center part down in the cup is sort of purple or reddish," Jane observed.

"You know, the Indians used to eat the seeds of this lily after they had been ground into meal. Sometimes they ate the roots too," Billy said.

"How do you know?" Jane asked.

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THE INDESTRUCTIBLE CHUCK

By ROBERT S. BELL

DAD eased the car to a stop just off the road and I grabbed the 6 by 30 Zeiss binoculars off the seat to train them up in the field. The brown spot in the clover patch resolved into a chuck feeding near his hole. The bottom half of his body was hidden but it was easy to tell he was a large one. It was my shot so I picked up the .257 Mauser and slowly opened the door to keep from arousing his suspicions. He continued to feed as I slipped my arm into the sling and dropped into a sitting position. A field of standing oats blocked the view from the prone position. The range was about two hundred yards and I therefore decided to attempt to hold right on the animal. Through the six power 'scope he stood out sharp and clear and, as I worked a cartridge into the chamber, he stood up and looked in my direction for a second. Mister chuck probably heard the bolt close even at that distance.

I put the Lee Dot on his shoulder and squeezed off the shot. At the report of the rifle, he flew about a foot in the air but landed running, or staggering, and in a fraction of a second had dropped into his hole. We were using the 60 grain Speer bullet, loaded to a muzzle velocity of almost 3300 foot seconds and it didn't seem likely that he would have moved at all if hit. We went over to look. I've missed them at ranges a lot closer than two hundred yards but this hold and let-off had been good. We found the spot where the bullet hit—just under the chuck. A small crater about as large as a man's fist was hollowed out in the ground. The lead core was completely

gone from the bullet but the jacket was there, turned inside out. It's this complete "blow-up" of these high speed bullets that makes them so deadly on game the size of woodchucks and which also makes them safe to use in settled country.

We didn't mind the chuck's getting away unhit but we hated the thought of leaving one escape wounded. This rarely happens, however, with this type of rifle since a hit anywhere in the body seems to anchor them permanently. Not that we ever deliberately take a paunch shot, but it does happen occasionally and that's when we're glad to be using a rifle with a little more power than is necessary as a general rule. Hunting is the greatest sport in the world but letting any animal escape wounded through the use of an inadequate rifle is un-sportsmanlike in the extreme.

We got back in the car and continued on up along the Susquehanna River wondering if that chuck realized how close he'd come to being the main dish on our table. We laughed over his surprised retreat but little did we know then that he had a couple of surprises for us, too!

Turning right at Little Roaring Creek we drove several miles without incident. It was a beautiful day, warm but not hot, the kind of a day that makes being indoors impossible. It was the sort of day that makes you think of a thousand things you'd like to do but you're too lazy to do them. I was day-dreaming, thinking how nice it would be to lie in the shade with something cool to drink and an occasional chuck to shoot



at, when Dad poked me in the ribs and pointed down across the meadow.

A whopping big chuck was sitting just outside his den in the fencerow about one hundred and fifty yards away. He squatted down when the car stopped but didn't run in. I heard Dad run a load into the Mauser and take a deep breath. I was holding mine, too, and watching through the glasses. The gun cracked and the chuck slumped forward, so dead his tail didn't even twitch. This load messes 'em up a bit if you like to eat them, but it hasn't crippled any either.

I had to walk a couple hundred yards to find a place where it was possible to cross the creek which was swollen from recent rains, but I finally made it and recovered the chuck. We don't eat them often but know a large number of people who do, so we always bring home any we get. No sense leaving them for the crows when some people like them.

About a mile up the road we saw a car parked and figured it was another "pig" hunter. We stopped to see how he was doing. There was a Model 70 Swift with

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RYEGRASS---FRIEND OF SOIL AND WILDLIFE

*Prepared for the Field
Management Bureau*

By PITTMAN-ROBERTSON
Project 21-R



Stooled ryegrass. Many of the roots were lost in lifting the plant from the stony and partially frozen soil. Plant grown under corn.

Judging by the still limited use of ryegrass, it is doubtful whether the all around usefulness of this plant is as fully and universally recognized as it should be. The many acres observed every winter without a protective covering seem to indicate the fact that people who love the land and all it supports, be it crops, wildlife, or just beauty, are in need of a closer acquaintance with this veritable jewel of the plant kingdom. Few other plants, if any, can equal ryegrass in the number of favorable points without having any serious disadvantages.

Three kinds of ryegrass are available, perennial or English, annual or Italian, and domestic. The most important of the three, is domestic or common ryegrass. A plant of uncertain parentage, it is neither a true annual nor a perennial but can best be described as short lived, with some plants dying after the first year and others persisting for two or more years. Its ancestors include hybrids of Italian, South American, and perennial species with additional field crossings. It is a tool which should be known to all who till the soil, whether it be for a living, for wildlife benefits, or a city garden.

Ryegrass makes a substantial growth in the fall and remains alive over winter. It is best known as a winter cover crop and probably makes its greatest contribution in this capacity by protecting the soil from erosion. The green mantle of interwoven grass blades close to the ground protects the soil from the impact of the heavy fall and spring rains and keeps it from being blown around by sweeping winter winds. In addition any water which might collect on the surface and start to run off, in spite of precautions, will find the soil tightly held in place by the tremendous root system of this grass.

By virtue of the continuous activity within the plant, unless the ground is frozen beyond root depth, the mass of fibrous roots perform an even more important function by absorbing the available plant foods which may be left over from the past season or have been liberated by decomposing mineral and vegetable matter. Some of these nutrients are used in growth

processes and others are stored in the roots. On bare soil, or one lacking living roots, these elements would be leached beyond root depth of most crops by water if they were not lost entirely by erosion.

After the ryegrass is plowed, roots and greens are broken down by soil organisms to make these nutrients available again for the benefit of the new crop. Equally important is the fact that they add a considerable amount of valuable organic matter to the soil, improving its structure and providing a vital link in soil fertility. The presence of organisms and the general supply and availability of nutrients depends on the abundance of organic matter. In this respect ryegrass even surpasses rye by doubling the root mass of the latter. A good stand of ryegrass will turn over like sod when plowed.

Establishment as a winter cover crop is simple. If sown alone 20 to 25 pounds per acre are sufficient. As a companion crop the rate may be reduced to 12 to 15 pounds per acre. The seed should be in the ground before late September. When planting ryegrass in corn, a seeder may be attached to the cultivator at the time of the last cultivation or the seed broadcast. As a companion crop to soybeans or buckwheat it may be sown when the main crop is six inches high. There is a possibility that ryegrass sown with oats may cause interference on very fertile soils but in general it is quite safe since its growth during warm,

dry weather is limited. It is only with the coming of the moist, cool season that ryegrass begins to grow rapidly.

There is not much danger of ryegrass becoming a weed anymore than timothy. However, some people confuse it with the serious pest quackgrass. The two are similar in appearance above ground but quackgrass has underground runners by which it spreads and stays alive while ryegrass does not. Ryegrass dies when plowed under.

The soil requirements of ryegrass are modest. It will thrive best on fertile soils. It will grow as well as other grasses on poorer soils but will not stool quite so readily, and somewhat heavier seedings are required. Wide ranges of moisture conditions are tolerated, but production will naturally decline on excessively dry or wet soils. Lime requirements are similar to those of orchard grass or brome grass, so strongly acid soils need correction. Winter hardiness is at least equal to other grasses in Pennsylvania. The average height, if undisturbed, seldom exceeds two feet and most of the plants will mature their seed in late June. A special point in favor of Domestic ryegrass is that it sells for less than any other grass seed on the market, including timothy.

Any more contributions than the above could surely not be asked of any one plant, and yet, ryegrass has something more to offer. Fully as valuable or perhaps more

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Deer browse on ryegrass. Plants were badly crowded, approximately one half of the roots were lost in lifting the plant from frozen soil.

IF YOUR DOG IS BITTEN



by
Don Shiner

THIS year at least 50 sportsmen in Pennsylvania will lose their dogs through ineffective venomous snake bite first-aid! Will your dog be one of them? The chances of your dog's survival rest entirely on you. Whether he will enter the land of forever happy hunting or continue through the years roaming the woodlands with you, rests on your knowledge of treating the infected wound.

There is nothing complicated about snake bite first aid. The same treatment can be used on humans and the poisonous venom can be combated effectively.

One of the major obstacles to proper snake bite first aid is *fear*. However, in some cases fear of poisonous snakes is passed off too lightly or again, they cause more alarm than necessary because these legless creatures are misunderstood.

Fear of snakes is almost hereditary in humans, proof of which are the countless strange tales told by men down through history. Indeed the first man was associated with a snake, the serpent in the Garden of Eden, as related in the Bible. Greek mythology tells us the story of Cleopatra who, tiring of life, allowed a serpent to bite her. Today, the Hindus regard the killing of a cobra as a sacrilege and permit these poisonous reptiles to roam about their villages and homes undisturbed with the resultant loss of thousands of human lives annually.

Even today many people in all walks of life view snakes with dread based on superstition and myth. The rattlesnake is said to be able to perform hypnotism; hoop snakes can hold their tails in their mouths and roll much like a hoop or wheel; milk snakes are capable of draining cows; and so on are these imaginations applied to snakes. We

have actually reached a point today where men boast with pride over killing a snake, a task considered performable by supermen only.

Snakes are the most widely distributed of all reptiles and some species range as far north as Iceland. Some snakes may bring forth their young alive while others lay eggs. The eggs are similar to those of a chicken but the shell or outside covering of reptile's eggs are soft and leather-like. They are deposited in small depressions in the earth, deserted by the parent, and left to hatch in the heat of the sun.

The flickering forked tongue is often regarded as the fang of a venomous snake. Actually, the tongue is the organ used to smell. This sense of taste and smell is highly developed and, actually, the snake "tastes" one's presence in the air.

The copperhead, timber rattler, and Massasauga or Swamp rattlesnake are the only snakes that need alarm sportsmen in Pennsylvania. Yet, even these snakes cause much unnecessary fear and superstition in the minds of men. The copperhead ranges from central Massachusetts southward to northern Florida, westward to Illinois, and from there southwest through Missouri, Oklahoma, and Texas. In Pennsylvania the copperhead has been found in every one of the 67 counties and today it can be expected in all but a few. The body is pale brown, or light reddish brown, with a series of large blotches on the sides somewhat resembling inverted Y's. These blotches are usually of a rich, chestnut brown. The body color varies considerably, sometimes being almost a pinkish-gray. Frequently the Y's on the sides meet at the center of the back, so that from above they resemble an hourglass outline. This snake is classi-

fied as small to medium in size with an average length of thirty inches. Three foot specimens are quite common, but a four foot copperhead is an exceptional find.

Copperheads are wary and secretive. For these reasons they exist better than most snakes in well populated regions. They are inclined to lie quietly and depend on protective coloration for safety. A copperhead may produce a warning almost as audible as that of a small rattler by means of tail vibrations against dry material. This snake will slide away to safety whenever possible but will fight viciously if cornered or stepped on. Copperheads frequent moist places and are more aquatic than either of our rattlesnakes. They are nocturnally active and often are found along roads after dark.

The bite of the copperhead is dangerous but seldom fatal. It is not as poisonous as the timber rattlesnake, its fangs are proportionately shorter, its venom not so virulent, and the amount of poison injected into the bite of lesser quantity.

The timber rattlesnake has been recorded recently in thirty-six counties of this state. It is now almost extinct in thickly settled regions but is probably increasing in numbers in the central and northern counties. The average length of the adult is a little less than four feet, but they have been known to grow to a length of six feet. The color varies widely, ranging from a sulphur-yellow to a velvet black on the body, with the tail black. On all except the black specimens, wide, irregular cross bands of dark brown or black—sometimes lightedged—are visible. The black specimens are usually males, although this is not always true. The yellow rattlers are females. These color phases have given rise to the names of Yellow Rattler and Black Rattler, though

both colors may be found in the offspring of one female.

The Timber Rattler is considered by experts to be a comparatively mild-tempered snake, with the males less irritable than the females. This snake sometimes rattles while coiled to strike, at times when it glides away, and usually when touched or trod upon. *It does not always rattle.* The species likes warmth. In the spring it lies on sunny ledges of rocks; in the summer it is more likely to coil under rock ledges protected from the hot rays of the sun, ready to retreat if disturbed. It may be found in boggy or swampy places, but in this state it is usually located in rough, rocky, mountainous areas. In the summer these snakes search for food over woods and farmland. About August they seem to migrate from the ridges to the valleys for water. In the fall they hibernate in large numbers in rocky dens, which generally have a southern exposure. Usually, when the first cold nights of fall arrive, these snakes, and others in the neighborhood—poisonous and non-poisonous—congregate and hibernate in specific crevices or “dens” beyond the frost line.

The Massasauga or Swamp Rattlesnake is a species of dwarf rattlesnake with large plates on the top of the head and with a small rattle. They have been found recently in the western part of the state and are grayish-brown in color with five longitudinal series of brown or black spots. The largest markings are oblong or “squarish” and extend down the center of the back to the tail where they become cross bands. Below these, on each side, two rows of smaller spots occur. Some specimens, however, are so dark the markings are indistinct. Adults have a length of two to three feet, with the average about thirty inches. These



All of Pennsylvania's viperine snakes have flat triangular heads, eyes with elliptical, catlike pupils, and a deep depression (the “pit”) midway between but below the level of the eye and nostril. Shown here is the portrait of a rattler.

snakes are extremely shy, but their rattle can be easily heard. The venom is small in quantity but extremely poisonous.

The Massasauga is to be found chiefly in or near swamp land. Until late June, they appear most commonly in swampy districts, though they seem to shun actually wet places. Later in the summer they may be found along fence rows or in fields near

swamps.

These three snakes are the only ones that need alarm sportsmen of Pennsylvania. A single pair of wound marks identifies the bite of any of them. Non-venomous snakes, when they strike, leave only a few small scratch marks. In the case of pit vipers, the venom is effective in destroying red blood cells, and does its harm in this manner. There is no reason, however, why death should result from even the most serious snake bite if care is exercised.

If your dog mistakenly steps on a rattler or copperhead and is stricken, the most important thing is to begin treatment immediately, at least within 10 minutes. Snake venom is carried throughout the body at a terrific rate of speed and any delay sends the chances of survival down the percentage scale.

Treatment depends on the location of the wound. If the bite has been on the leg, a tourniquet should be applied above the wound. A tourniquet is merely a cloth or rope which is tied around the limb and twisted with the aid of a stick or knife until it is tightened enough to stop the circulation of the blood. This tourniquet, however, must be loosened at least every half hour so that fresh blood can be carried to the lower part of the limb. After the tourniquet has been relaxed a few minutes, it should be tightened to its original position. Remember, it *must* be relaxed at least once every twenty minutes or half hour.

Next, make a series of cuts across the wound. Force the wound to bleed freely and continue to make cuts around the wound pointing in all directions. However, a dog is usually not bitten on the legs, the snake usually striking at the dog's head,

Non-venomous snakes in Pennsylvania, such as this hog-nosed snake, have eyes with round pupils, no “pit,” and heads that are generally oval in shape.



throat, or body. Here a tourniquet can not be used and even greater speed is required to save the animal's life.

The fur and first layer of skin is rather loose and can be lifted or stretched from the dog's body. This fur and skin at the location of the snake wound should be stretched from the body and, using a sharp knife, the wound and a large patch of flesh and fur surrounding the bite should be cut away. This is not being cruel as the dog's life depends on it! Actually, the dog will not mind it and will be unaware of the knife work since he will already be in terrific pain from the snake venom.

As soon as this has been done, numerous cuts, about a half inch deep, must be made in the wound and surrounding flesh. The wound must be made to bleed freely and quickly so that the poison can be discharged. Two or three dozen cuts are not too many. These cuts should fan out in all directions and at any place close by that begins swelling, an indication of an accumulation of poison. The blood should not be allowed to coagulate since this would defeat the purpose of the bleeding. If water is at hand, bathe the wound in it or use the knife to scrape away the hardened blood.

If the dog vomits several times, do not feel that he has gone mad or that all hope is lost. The dog is deathly sick but the vomiting is caused by the action of the venom on the body and by increased body temperature. Give the dog all the water he can drink, bathe him in cold water, and force him to lie down and remain quiet. Any exercise causes the blood to circulate faster and to carry the venom through his body at a more rapid pace.

Often if the wound bleeds freely, all or most of the poison is carried out before it has a chance to spread. Some suction device is an aid to the bleeding and can be used if one is part of your equipment.

Having done this much, whether or not you know it, the chances of your dog's survival have been decided. He is sick from fever and the poison, weak from loss of blood, and must be carried home. Visit a veterinarian at once. He will give your dog an injection of anti-venom and, if much blood has been lost, can give the dog a blood transfusion. With your proper first aid and the skill of your veterinarian, the dog will be as lively as ever after two or three weeks of convalescing.

Don't think for one minute that some dogs are immune to venomous snake bite. No dog is! Your dog may be bitten by a venomous snake and live without any treatment. Dogs, by instinct, are equipped to administer their own first aid which usually consists of emersing the wounded limb or part of the body in mud, but in the late summer training season and during the fall months, mud is a scarce item in most of Pennsylvania's terrain. Furthermore, the dog may have been only glazed when the snake struck, the fangs may not have penetrated the fur, and the venom might not have been injected into the blood stream. Cases like this have been reported.

Therefore, if you love your dog, when he has been struck by a venomous snake, follow this first aid treatment, get him to a veterinarian as soon as possible, and save his life. He will then have an excellent chance to spend many happy hunting hours with you throughout the years!

IF YOU ARE BITTEN

Reptiles have agitated man over the years. Sometimes they have endangered him. However, the role of the snakes we know has been more on the frightening side, not at all subtle, as in the case of the serpent in the Garden of Eden.

In Pennsylvania, the fear of an encounter with snakes keeps many a would-be picnicker, fisherman or hiker out of the woods during the warm weather months.

It should be known, however, that, of the many snakes native to this state, only the rattlesnake and the copperhead are poisonous. As a rule, even they will retreat at the approach of humans, unless they are startled or feel endangered.

Sensible precautions will practically eliminate the danger offered by poisonous reptiles. In a large percentage of cases, the rattler or copperhead strikes in the foot or lower leg section. A person is safe if he wears high shoes or boots. The fangs of our venomous snakes usually will not penetrate either.

In snake country, one should not reach onto a rock above his line of vision, and should not grasp logs or stones on the ground until after looking carefully. It is from these places that one is usually struck on the hand or lower arm by a hidden snake.

It is a good precaution for outdoors people to carry modern suction kits for emergency use in summer. It is important, when struck by a rattler or copperhead, to follow these rules in the order given:

1. Keep calm. With modern treatment, the likelihood of death from snake bite is remote. Most cases would recover without treatment or with mistreatment. Fear,

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Karl Maslowski Photo

The venomous copperhead is one of the most common of American poisonous snakes. It has been found in every one of Pennsylvania's 67 counties.



Art Jarvis Photo

Heavy, heavy what hangs over? In this case it's tons and tons of solid rock and Charles E. Mohr, formerly of Philadelphia's Academy of Natural Sciences, is quite glad that it really is solid.

PENNSYLVANIA'S UNDERWORLD

By BILL WOLF

Animal Life, Past and Present, Makes Cave Exploring Interesting as a Hobby

CAVES hold a fascination for most persons who almost invariably think of them as hiding places for wild animals. They look at a dark and forbidding hole in the ground or in the face of a rock cliff and picture bears, foxes, wolves and rattlesnakes as lurking inside. Nothing could be farther from the truth, but imagination always peoples caves with strange things. The actual truth is that caves do hold interesting animal life, but it isn't at all what common belief says it is. Pennsylvania's many caves are no exception to this.

There are at least 100 known caves in this State of sufficient size or interest to have been explored, and, in most cases, surveyed. Their animal life, past and present, has been studied. There undoubtedly are many more that have never been seen by man. Almost every year, some quarrying or road-building operation brings to light more of these hidden caverns. The more spectacular caves are developed commercially. The others are of interest particularly to cave explorers who make a hobby of going underground, to geologists, to zoologists, amateur scientists and students.

Nearly all contain some forms of animal life. My own first experience with the most common inhabitants of Pennsylvania caves occurred a score of years ago when Harry Stacks, of Lancaster, and I first explored the North York cave. This is located north of the city of York on the York-Harrisburg highway, with the entrance in an old limestone quarry. At least, it was there then and I don't suppose time has changed it much.

We crawled through the low entrance passage, and soon reached the main chamber which is like a large room. It was winter, but the cave was moderately warm. Caves have a rather constant temperature which makes them warmer than the outside air in winter, and cooler than under the sun in summer. It was our first experience in a cave and we stopped in the main chamber to gape at some hibernating bats, hanging singly and in clusters, upside down on the walls.

We must have stared too long, and played our lights too much on them, because they started to stir in their sleep and some even made protesting squeaks. We knew we had disturbed their rest when we started down one of the several narrow passages that lead the explorer farther under earth in this small cave. We suddenly became aware of bats flying over our heads.

They flew almost silently, making only their high-pitched and nearly inaudible sounds and brushing the air lightly with their leathery wings. "Blind as a bat" certainly didn't apply to them because they flew unerringly, and any squeamish woman who was certain that "bats get in the hair" would have been pleased to see that they carefully avoided the two human beings who had interrupted their sleep. I don't know how many there were, but it was no inconsiderable number. They moved back and forth above us as long as we were in that small passage.

The bats were the only cave life we observed, probably because we were inexperienced and failed to notice anything else. However, we did come upon two boys on our return enroute to the main chamber, and they might be considered forms of cave life. They carefully explained to us the difference between stalagmites and stalactites, for which needless information we thanked them. Earlier visitors had destroyed and carried off any stalagmites and stalactites which had formed in that cave.

It wasn't anything much as Pennsylvania caves go; but there always must be a first, and Harry Stacks and I had chosen the cave that was most convenient. Both of us lived and worked at that time in York.

There are much larger caverns in this State, some of which compare favorably in beauty with more famous Mammoth Cave and Luray Caverns farther south. You must have noticed the signs of some of these commercially developed caves when on

hunting trips, because they are found on many of the highways. It is not the place here to discuss them, but the reader curious to know more about Pennsylvania caves in general is advised to consult an excellent book called *Pennsylvania Caves*, by Ralph W. Stone, published as Bulletin G3 by the Topographic and Geologic Survey under the Department of Internal Affairs, Harrisburg, Pa. The first edition of this (10,000 copies) came out in 1930; there was a revised and enlarged edition of 15,000 copies printed in 1932.

Our concern is more with the animal life of any cave, large or small, developed or left in a more or less natural state. This particular field has been pretty well investigated by Charles E. Mohr, once with the Reading Museum, formerly with the Academy of Natural Sciences at Philadelphia, and now with the Audubon Society. I have only had the pleasure of going through one cave with Mohr, but he is perhaps Pennsylvania's outstanding authority on cave fauna. The pictures with this article show Mohr at work with some of the cave dwellers found underground at South Temple near Reading in Berks County.

Bats are the most common animals found in the caves of this State. These strange winged mammals go into hibernation early in the fall, as soon as cool weather kills off the insects on which they live. Caves furnish ideal places in which to sleep through the long months until spring returns and brings with it another crop of insects because the temperature is equitable underground. Some bats also inhabit caves during the summer.

They may look alike when seen in the dusk of evening against a darkening sky, but a trip to any cave containing them will show considerable variety in the bats. Seven kinds inhabit Pennsylvania's caves, ranging in size from the big brown bat to the least bat, or the pigmy bat. The other kinds are the Trouessart's bat, the similar little brown bat, the social bat, and two varieties of Georgian bats. Some are rugged individualists, clinging upside down to the rock walls by themselves. Others are sociable, hibernating in clusters like strange fruit. These clusters are sometimes called "batteries."

One thing that always will amaze me is the ability of bats to hang head-down, suspended only by as little as one minute

Art Jarvis Photo

Mohr examines a pendant group of brown bats. They sleep thus, often from September to April, emerging from the winter warmth of the cave only when spring arrives and brings with it the insects on which they feed.



toe fastened to a slight irregularity in the rock face. Some, of course, cling with several toes on the hind feet.

The other chief form of animal life found actually living in caves is the Allegheny cave rat, *Neotoma pennsylvanica*, a creature so shy that it is seldom seen by cave explorers. Unexciting as it may sound, about the only other regular inhabitants of caves are various insects, including the very common cave cricket, "grand-daddy-long-legs," a few moths, as well as part-time residents such as hibernating mosquitoes, various flies and gnats, the Mourning-cloak butterfly, certain spiders near cave entrances, and Mohr has reported bees hibernating in Morgan's Cave in Berks County. Birds sometimes nest just within a cave entrance and at South Temple Cave we found disgorgings on the floor of the entrance where some owl had deposited the indigestible pellets from its meals. A few salamanders live just inside caves. Other than these things, there are no regular cave dwellers except for a few small forms of insect life. Pennsylvania apparently has none of the blind fishes or amphibians of caves found in the south.

However, all kinds of animals have wandered or fallen into caves, in the prehistoric past as well as in modern times, and some have taken up temporary residence beneath the earth. Persons who know nothing about the habits of bears usually believe that they live in caves through choice. They don't although bears have used caves. Bear Cave near Hillside in Westmoreland County probably got its name from some incident connected with a bear holing up or even living temporarily in it. Hipple Cave 12 miles north of Everett in Bedford County was found by a pioneer-hunter named Hipple who tracked a bear to it.

But bears do not haunt caves regularly and your chances of meeting one below the earth are infinitely remote. They certainly wouldn't go any farther than the semi-light near the entrance because bears can't see in the dark any better than they can in daylight where their eyesight is not exactly keen.

Snakes just don't exist in caves. Temperature and living conditions are all wrong for them there, and any snake that winds up in a cave by accident will die there unless fortunate enough to get out. However, many small animals use the entrance part of caves from time to time as more or less permanent homes, although they seldom venture far within the cavern. Groundhogs, gray foxes, skunks, weasels, raccoons, deer mice and chipmunks all have been encountered, but not frequently.

The entrance to some caves is vertical, or else is found in one of the curious sinkholes located in this State. In such a case, a cave may collect the remains of many animals, just as an abandoned and uncovered well may engulf unfortunate wild things. Mohr reports finding hundreds of bones of all sizes in the sinkholes around New Paris, Pa., in Bedford County. The animal victims of these dangerous sinkholes ranged in size from bats to deer, and even elk skulls and antlers were discovered.

The bones of some forty different kinds of animals were found in Durham Cave, which is along the Delaware River in Bucks County. Some of the identified animals are now extinct in Pennsylvania. Extinct and existent animal remains were found in the caves known as Hartman's in Monroe County and Port Kennedy in Montgomery County.

Historic Indian Cave in Huntingdon County sheltered Indians and robber bands in the past, and there is a legend of bandits connected with nearly every large and well-known cave in the State. Conodoguinet Cave in Cumberland County must have been a shelter for prehistoric hunters because human bones were found in it when the cave was first explored in the past century.

Domestic animals fall into, or wander into, caves and die there with fair frequency. In the same manner, extinct animals once blundered into caverns and expired there, to leave their bones for our scrutiny. Or else they were dragged there by larger predators. An astonishing assortment of bones was found in the Frankstown Cave in Blair County when it was discovered in 1907. Most of them were fossil remains and included the bones or teeth of reptiles, birds, bats, wolves, bear, buffalo, rodents, deer, musk-ox, peccary, tapirs, sloths and mastodons. It is difficult to explain how the remains of one adult and five small mastodons ever got into the upper part of the floor deposit in which the bones were found. They must have blundered there, but it's hard to imagine such hulking, huge beasts as mastodons being trapped in a cave. The Frankstown cave was obliterated by quarrying operations.

Indian weapons and utensils found in the Hartman (or Crystal Hill cave) in Monroe County may indicate how some of its many animal remains got there. Bones of wild turkeys, box and snapping turtles, lynx, wolves and many other common animals were found, as well as those of four extinct species, caribou and bison, peccary and a kind of beaver no longer existent.

Forty-one extinct mammals were identified among the bones of 54 animals found in Port Kennedy Cave on the Schuylkill River below Valley Forge before the cave was quarried away or filled in. There must have been good hunting around there in prehistoric times, because a bear bigger than a grizzly, three kinds of giant sloths, a mastodon and two sabertooth cats were among the animals identified.

The giant bears, wolves, sabertoothed tigers and other big predators undoubtedly dragged some of the prehistoric animals into the caves, and others must have fallen into them through fissures. Then, too, streams running into caves might have carried the carcasses of dead animals and deposited them within the earth.

Cave exploring is a fascinating business and not half so dangerous as it sounds if a few ordinary precautions are taken. The equipment is simple: A crash helmet with a carbide lamp such as miners used to use, a flashlight as a reserve, some sturdy old clothing that won't be harmed by becoming soiled, a ball of twine if entering a totally unknown cave with more than one passage, a light but strong rope to assist in descending into chambers and returning again. The most dangerous thing about cave exploring and the one thing veterans try to avoid, is a descent without a companion. No one should enter a cave alone if it is the least bit dangerous, because a disabling injury such as a fall would leave you to become some of those bones we were discussing a few paragraphs back.

Rock falls are almost unknown. The crash helmet is worn to guard against the only minor injuries ever encountered in cave exploring—a shower of small rocks, dislodged in a steep passage and falling on the leaders of a group. The twine is to be put down as a trail to follow back to the entrance.

Our trip with Mohr through the South Temple Cave near Reading is typical of those which can be made with little discomfort and considerable interest. We went there primarily to make some photographs, and for Mohr to take a "bat census" and resurvey part of the cave.

The entrance to South Temple is on the cliff face of an abandoned quarry. It's easy to enter the cave and most of it is easy to explore. Our party of four left daylight behind almost immediately as we descended into the earth. Soon we were in a world of absolute dark if we turned off our lights, a world of jumbled rocks, passages gouged in the solid rock by water ages ago, a world of complete, total silence.

We went to the ends of the several passages, which are quite long. In some places, it was get down and crawl like a snake, or else squirm through a waist-thick opening, or lean away backwards and edge along some narrow cleft, slide down a clay fill or crawl over fallen rocks. A cave is no place for a person with claustrophobia, or fear of enclosed places. If you feel smothered in a closet or vault, don't enter caves, because you will have the impression that the tons and tons of solid rock above and around you are about to fall in. As we neared the end of one long passage, we could hear the steady drip of water, the only sound experienced in the depths other than noises we made ourselves. We eventually came upon the source. A tiny pool at the end of the passage into which water was slowly trickling. This is a "new" cave, formed within comparatively recent ages, and the pool probably is the tail-end of nature's operation. There are no stalactites or stalagmites in South Temple, no flowstone or dripstone.

One of Mohr's objects was to correct a rough map he had made of the cave ten years before, and he used an engineer's compass for the purpose. We also took an inventory of the bats in the cave—and the very first one we saw was a revelation in beauty, if a bat can be called that. Mohr directed his light up to the ceiling at one point, and the rays hit upon something that glittered brightly. It looked like a cluster of diamonds—but



Art Jarvis Photo

Collecting insect specimens involves drawing them by suction into a poison bottle.

it was only a tiny pygmy bat covered with droplets of water. Each tip of fur held a globule which sparkled under the light. We found 95 big brown bats hibernating in the cave, 40 pygmy bats, five little brown bats and three rather rare long-eared bats, but only the pygmies were covered with the moisture that made them look like suspended jewels. Why it condensed on them only is a mystery.

There are still caves to be found in Pennsylvania, caves which may hold further traces of prehistoric man and animals who once roamed, hunted, lived and died in what is now our State. However, if you think you have found a new cave, and have crawled to the utmost point you can reach, don't be surprised to find there, written on the wall: "Kilroy Was Here!" Cave explorers do get around in the most unlikely spots.



Dr. H. E. Kilgus, member of the Game Commission, presents diplomas to graduating officers.

The Ross Leffler &
Pennsylvania
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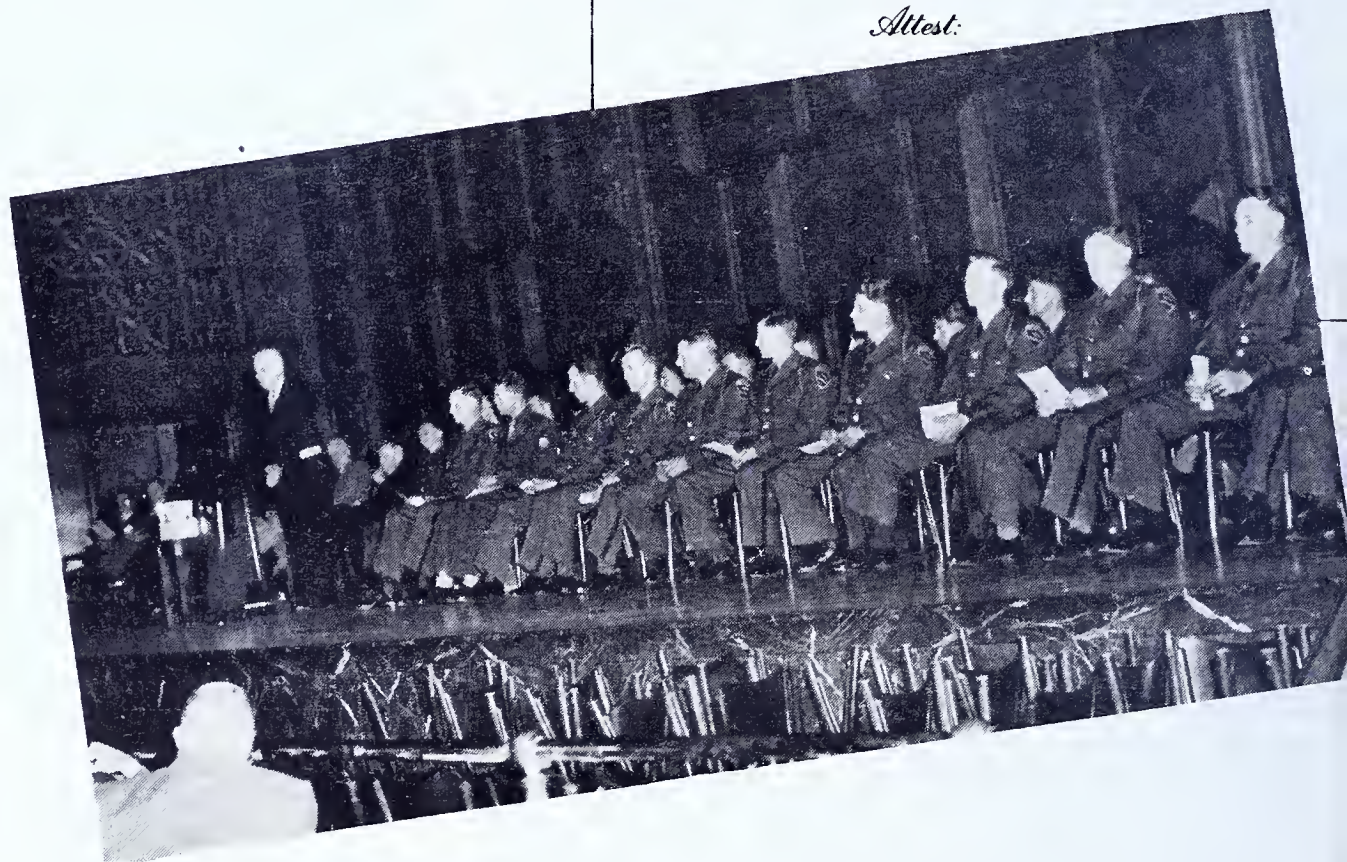
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Game Management, P
as prescribed at the School of Cons

Pennsylvania

Given this 27th

Lord one thousand nine hundred a
have affixed our signatures

Attest:



Hon. Ross L. Leffler, President of the Game Commission, addressing the class and assembled guests.

Graduation ceremonies were held June 27, 1949, in the Forum of the Education Building, Harrisburg, for the twenty-five Pennsylvanians who successfully completed the course of instruction they began June 1, 1948, at the Ross Leffler School of Conservation, near Brockway.

During the year-long course, these men received training at the school and in the field along many lines designed to give them thorough knowledge of all phases of game management and related conservation practices.

John C. Herman, a member of the Pennsylvania Game Commission, presided over the graduation exercises. Wilbur M. Cramer, Superintendent of the School of Conservation, introduced his staff and the members of the Fifth Class. Ross L. Leffler, President of the Pennsylvania Game Commission, addressed the new officers, stating: "You now become members of the finest group of conservation officers anywhere." S. Dale Furst, Jr., First Vice President, Pennsylvania Federation of Sportsmen's Clubs, directed his re-

marks to the new officers along the line of officer-sportsman relations. E. M. Swanger, President, Pennsylvania Division, Izaak Walton League, dwelt on the part Game Protectors play in conservation. Thomas D. Frye, Executive Director of the Game Commission, welcomed the graduates to the Commission's field force, keynoting his remarks around their new title of Game Protector. He said, "The title of your position is symbolic of the important duties in which you are about to engage. You now join with others in whom is entrusted the protection of our wildlife—and thus you become the true friend of every good sportsman." Calvin A. Hooper, Jr., represented the Fifth Student Class in telling of school experiences and the expectations of his classmates in conservation work. Diplomas were presented by Dr. H. E. Kilgus, member of the Game Commission.

The oath of office was administered by Judge J. Paul Rupp, Court of Common Pleas, Dauphin County.

Following are the names of the members of the graduating class,

School of Conservation

the Commission

Pennsylvania

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on, and Related Subjects

maintained by the

the Commission

May 1949, in the year of our
in witness whereof we



Judge J. Paul Rupp, Court of Common Pleas, Dauphin County, administers the oath of office to the new Game Protectors.



The Fifth Student Class of the Ross Leffler School of Conservation poses for a graduation picture.

along with the localities from which they came and their present field assignments.

Stephen C. Mace, R. D. 1, Hazleton, Div. A, Dist. 8, Kutztown
Billy A. Drasher, Moosic, Div. A, Dist. 14, Pottstown
Earl E. Geesaman, Hershey, Div. A, Dist. 17, York
John H. Doebling, Phoenixville, Div. A, Dist. 22, Jenkintown
John Putnam, Crosby, Div. B, Dist. 5, New Milford
John C. Behel, Lewistown, Div. B, Dist. 11, Wilkes-Barre
Samuel C. McFarland, Reading, Div. B, Dist. 13, Hazleton
Victor C. Shaffer, R. D. 1, Butler, Div. B, Dist. 17, Thornhurst
Paul A. Ranck, Lewistown, Div. C, Dist. 9, Williamsport
Robert K. Benscoter, Wapwallopen, Div. C, Dist. 11, Eagles Mere
Albert J. Kriefski, Glen Lyon, Div. C, Dist. 14, Mifflinburg
Dean M. Lesnett, Bridgeville, Div. D, Dist. 7, Huntingdon
John R. Hiller, McKeesport, Div. D, Dist. 11, Saxton
Paul R. Miller, Blairsville, Div. D, Dist. 18, McConnellsburg
Robert F. Ellenberger, Sykesville, Div. E, Dist. 4, Coudersport

Daniel E. Russ, Trucksville, Div. E, Dist. 11, Driftwood
William D. Neely, McGees Mills, Div. E, Dist. 9, Austin (Temp.)
Woodrow E. Portzline, Emporium, Div. F, Dist. 18, Slippery Rock
Donald M. Schake, Export, Div. F, Dist. 19, Knox
Robert V. Rea, Harrisville, Div. G, Dist. 12, Homestead
George T. Church, Jr., Butler, Div. G, Dist. 16, Washington
John J. Troutman, Shippensburg, Div. G, Dist. 17, Charleroi
Edward W. Cox, Huntingdon, Div. G, Dist. 18, Meyersdale
George E. Hay, R. D. 2, Somerset, Div. G, Dist. 21, Waynesburg
Calvin A. Hooper, Jr., Altoona, Spec. Assignment, Div. C

An out-of-state member of the graduating class was Eugene Dale Maxwell, from the field force of the State Game Department of Washington. The Washington State Agency sent him to Pennsylvania's unique school to absorb the techniques and training offered here so that he might return to his home state equipped to impart similar methods and training to conservation officers there.



mother mink

by
Rutherford
Montgomery

BRIGHT stones in the creek bed reflected the warm May sunshine. There should have been movement in the stream, shadowy movement of green-gray forms darting up toward the pool under the big rock. There was no movement, no sign that trout lived in the stream. This was disturbing, it stirred anger in the she-mink poised on the rock above the water. If there had been a single trout lying along the riffle it would have darted upward the moment her dark shape appeared. For more than a mile she had scouted the riffles, but she had not sighted a single fish.

Hunger gnawed inside her, a hunger that was greater than any she had ever known. She shifted her body and stared up at the pool. When she moved she felt a stirring inside her which made her uneasy. For days she had been hunting for a den where she could enter a new phase in her life. Never before had the barrenness of her home grounds caused her such worry. It was a lean country and she had often gone hungry, but she had never known fear. Now the lack of trout in the stream, the emptiness of the thickets where there should have been rabbits, rats and mice, the stillness of the open meadows where there should have been grouse and small birds, all of it spelled danger to her. Once holed up with the young she was expecting she must have food near at hand. She was seeking a deep pool with a trout riffle below it. She should den close to a pool where she could catch fish quickly.

Being a tireless creature, filled with nervous energy, and a strength greater than any other animal of her size except the weasel, she seldom knew fear or thought of danger. Unlike the weasel she was cunning and wary. She went her way unafraid but unseen. No other animal could vanish so quickly, disappearing from sight under a tuft of grass or down a burrow before

even the big eyes of a tiger owl could catch the movement. She never felt the cold paralysis of fear so common to the hunted and to many hunters. But now she was filled with a fear which touches every living thing, the fear for her young. This would be her first brood. The urge to conceive had been strong and savage, the urge to protect her young was just as strong and savage.

She vanished from the rock in one swift, back-arching jump. A crested jay high on a dead limb cocked his head, and flicked his tail, but he did not scream because he was not sure he had seen a killer. He was not sure he had detected motion at all.

Alert for guidance from her nose and her small ears she moved up the stream. Her umber-brown body, black along the back and tail, made her stand out in the green twilight of the thickets. But this was no handicap to her hunting. She preferred to flush her game and then to capture it in open chase. Her prey would see her, but few would escape once she had set her keen snout upon their trail. She was a tireless runner, and she could enter an amazingly small burrow or runway. Where the long-tailed weasel could go she could go, down the hole of a squirrel, into the chisled opening made by a woodpecker, up the water filled passageway of a muskrat. She was at home in the water and could catch trout, not with the smooth ease of the otter, but with a skill which was usually rewarded.

Her kind had learned much cunning because of the coat she wore. Her dark and lustrous fur was much sought after. Her cunning kept her kind from extermination. She did not avoid man any more than she avoided the tiger owl, she simply out-witted him.

As she moved along, her senses were alert for the cluck of a grouse, the rustle of a mouse, the scent of anything she might devour. In a hunting ground where the thickets held life her course would have been a devious one, a darting to the left and to the right, the swift exploration of a burrow, a dash along a dim mouse trail. Today her course was fairly direct because there was no sound or scent to divert her. The noon sun, spattering through the leaves of a willow thicket, found her five miles up the creek. Her belly was leaner and tighter, and the movement inside her had become more insistent. The click of a grasshopper made her dart to the right. She located the solitary hopper and pounced upon it. It was only a tiny morsel, mostly spiney legs and dry wings, but it was food.

Traveling by day was not to her liking, but necessity drove her on. For three days and nights she had been moving steadily, searching for the den she must have. In all of that time she had eaten only a few hoppers and one small mouse. She crossed a low divide as the afternoon sun began to sink. Without loss of time she located the headwaters of a stream, and started down its course. Very soon she came upon man smell. The first boot track she came upon made her rise to her full twenty-four inch height. For five full minutes she stared out over the tops of a clump of grass. Seeing no upright walking animal she moved on.

Evening found her following a pole fence. She caught two mice, and the hunger inside her lessened. But she had not located a den, and the stream had not offered good fishing. A savage desperation was taking hold upon her. It was this feeling of desperation which caused her to follow the fence and not the stream. Her ears told her that the fence led to a larger stream. She had only a little time, perhaps an hour or two. She moved faster, darting through the brush which crowded along the crooked fence.

The fence brought her to a corral and several buildings before she reached the large stream she could hear below. Here the man smell was very strong. She tested it and hissed. Then she wrinkled her nose eagerly. The smell of the barn yard was exciting, there was a strong rat scent and strong chicken scent.

Moving into the corral she darted toward the barn. A hen house had been built against one side of the barn. She paused beside the henhouse and wrinkled her nose. The chicken smell was very strong, and she could hear the birds on their roosts. Moving around the wall she came to an open side of the house. She could see the chickens on their roosts. A wild eagerness filled her because she was hungry. But she could not reach the sleeping chickens because a wire netting held her back.

She circled the henhouse and finally climbed on top of it. The open scratch pen was screened over the top as well as on the sides. Careful exploration revealed no hole through which she could squeeze. Turning away from the henhouse she sniffed and bared her fangs. Chicken smell was new to her but rat smell was not. She moved swiftly, ducking under the barn floor.

She came upon a rat hole before she had gone far. The rat hole led up into the barn.

She followed the passage and found herself inside the barn. Her silent entry caught a large rat in the act of gnawing corn from a cob. Before the rat could dash away she was upon it and had driven her fangs through its neck. Tearing the body apart she feasted, bolting the warm flesh, hissing and snarling because the strangeness of being inside a building made her uneasy.

One rat was not enough to satisfy her hunger. She picked up a fresh trail and was off into another passageway. The frantic squeaking of the rat she had killed had sent all of its friends scurrying to their nests. The slender mink found herself in an opening between the wall of the henhouse and the barn wall. She came upon a second rat in its nest. It fought desperately, but could not escape the lightning thrust of the mink. She ate the rat, then explored its nest.

The rat nest was made from feathers and cotton. She enlarged it and curled up. She knew she could go no further. The uneasiness caused by the man smell and the strangeness of this man made cavern were swept aside by the need of the moment. She had not found the nest an hour too soon. Within minutes after she had curled up her first baby was born. Later three others arrived. They were tiny creatures no bigger than a man's little finger. They were naked, blind and helpless. For two days she stayed in the nest with them, cuddling them, teaching them to drink. She left them only once. That was when a big field mouse blundered down the narrow passage. She made a quick kill and a quick meal.

The mother mink was feeling the heavy responsibility of coaxing her babies through the first days of their lives. She must give them strength to live through the period when they were on trial, when it was being



decided whether they would be granted the right to become hunters. None in the wild live except by strength against the dangers ready to destroy the weak. The tiny creatures had no strength, no cunning, no savageness. They had only the spark of life which flickered feebly. But they had a mother whose savage will to make them live was very strong.

On the third day the mother listened to the farmer and his son as they worked in the barn. If she had been free to go she would have slipped away that night. But fate had decided that she must stay close to where men came and went in their clumsy and noisy way. She did not stir until the men had gone, and even then she did not leave the nest until darkness had settled. She was sure of one thing. This was a fine place to raise a brood so far as food went. The barn housed several hundred rats and many mice. Already she had forgotten about the chickens. They were a part with the man smell and her wary brain warned her to stay away from them. The rats and the mice were of her world. They had the wild smell.

Her attitude toward this fine hunting ground she had found was different from the attitude of her kin the weasel. A weasel would have gone blood mad, it would have rushed through the barn killing every rat it could find, it would have sought a way into the henhouse, and once inside, it would have slaughtered every hen. By dawn the weasel would have moved on seeking other fields of carnage. Not so with the mink. She curled up with her babies after making a kill. The first trip called for two rats, but after that she usually killed but one.

The rats in the barn were not stupid like the brook trout in a pool. They were trap wise and poison wise, they had mauled the farmer's cat, and outwitted his terrier. They were not a breed to be easily exterminated. They tried attacking the brown killer in groups, but after the first savage battle, in which four rats were killed, they gave that up. They knew there was only one thing they could do, they must leave the barn. But they did not want to go because life was easy in the barn, and the nearest ranch with a barn was ten miles away. They went to the woods and made quick trips back to the barn at night. This suited the mink very well. Each night she made a kill.

And by now she was losing some of her uneasiness over the human voices. If she had been able to understand the farmer and his son she would have learned that they were amazed because the rats had migrated. They were pleased, but they were puzzled. The terror could have told them what was up. He sniffed about excitedly and barked a lot, but he never stayed in the barn at night so he never met the slim mother mink.

One night the mother was foraging under the floor of the barn. She had washed her babies and left them cuddled up in the nest. Her hunt took her far from the nest. Not a rat had dared return to the barn that night so she had to catch mice who were too foolish to migrate or to learn from the fate of their own brothers, sisters and families.



The babies slept peacefully. One of them squirmed up out of the tight little ball they had formed. He was the largest of the babies, a husky fellow who was already feeling the urge to explore. He was very much a mink. During the long term of blindness he had been impatient. Now he could see, though he had little idea what there was in the world to be seen because he had only two rough walls and a pile of feathers and cotton to look at.

Unsteadily the youngster worked his way out of the nest. He moved a little way along the board avenue between the walls. His whiskers twitched and his head moved from side to side. Pausing he sat staring at a white patch on the wall.

At the far end of the passage he heard the scratching of feet. In some way he knew the scratching was not made by his mother. He called to her. She was far down under the barn catching a mouse she had cornered and did not hear him.

The sounds which had come to the little mink were made by a big male weasel. The weasel had discovered the barn and was eager to start killing mice and rats. He sniffed and hissed softly as he hurried down the passageway between the walls. The rat smell was there but it was not fresh. There was mouse smell, and it was fresh. There was another warm smell, too, the smell of the mink babies at the far end of the passage. Hot lust surged within him. He leaped ahead eager to strike. He had killed dozens of chipmunk families in their dens, he had slaughtered families of rats and squirrels. When he caught a warm live smell the fury to kill always filled him.

The young mink had no real feeling of danger when he saw the yellow vest of the killer loom before him. But instinct made him call loudly for his mother. A second later the weasel was upon him and his fangs were cutting deep. The little mink screamed, and this time his mother heard.

The weasel had paused to lap the warm blood of his victim. It was a ritual he followed until he was satiated and could drink no more. His pause allowed the brown mother to overtake him before he moved on to the nest. When he heard her savage scream he whirled. His little eyes blazed with fury. He was not afraid of her, he was savagely angry because she had challenged him. She leaped straight at him. He sprang to meet her and they rolled over in the passageway. The weasel was a deadly fighter, his strength far greater per ounce of weight than any wild killer, but the mink was fighting for her young, and this gave her a savage courage. Her fangs lashed and ripped until they found the yellow throat. They sank deep and the weasel leaped and ripped with his claws but could not free himself. Slowly his twisting became only a shuddering jerk of body and legs, then he went limp. The mink tossed him aside. She began nuzzling her dead baby, licking him, trying to rouse him.

After a time she picked up the little one and carried him to the nest. She put him with the others and lay down beside her brood. She was restless and uneasy. The nest no longer seemed a good place to leave her babies. It was a place that was not right for her. No weasel would have found her wilderness nest. She got out of her bed and stood staring at the dead weasel. Finally she dragged the carcass far down the passageway and out into the barn. When she returned she carressed the dead baby. It was cold now and had lost something of its rich smell.

After an hour with her babies she picked up the dead mink and moved down the passageway. She moved out into the cool night. Pausing she listened. From far down the slope rose the murmur of a stream. She started off at a loping run.

The stream, when she came to it, was wide and deep. It had many fine holes and sparkling riffles. As she slipped along up stream she heard the splash of a trout breaking water in a pool. On her left she caught the swift rustle which told her a brush rabbit was feeding nearby. She hurried on, leaping over rocks and logs. She halted near a big rock. One side of the rock was in the water, the other side was hidden by brush. Ducking under the brush she scooped out a little basin. Dropping the baby into the depression she turned and hurried away.

Three trips to the barn used up most of the night. What was left of it she spent in making a moss nest which was covered overhead. It would be warm and dry, and it was well hidden. She curled up with her brood and closed her eyes. When daylight came she was aware of it, but she did not awaken.

That morning the farmer's son told his father he had discovered why the rats had left the barn. He had found the terrier worrying a weasel in the barn. The farmer scolded the terrier for having killed an animal that had driven all of the rats away. The son was rather proud of the terrier for having been able to kill a weasel. He knew they were terrible fighters and usually came off the victor when they met a small dog.

Answers to What's Wrong

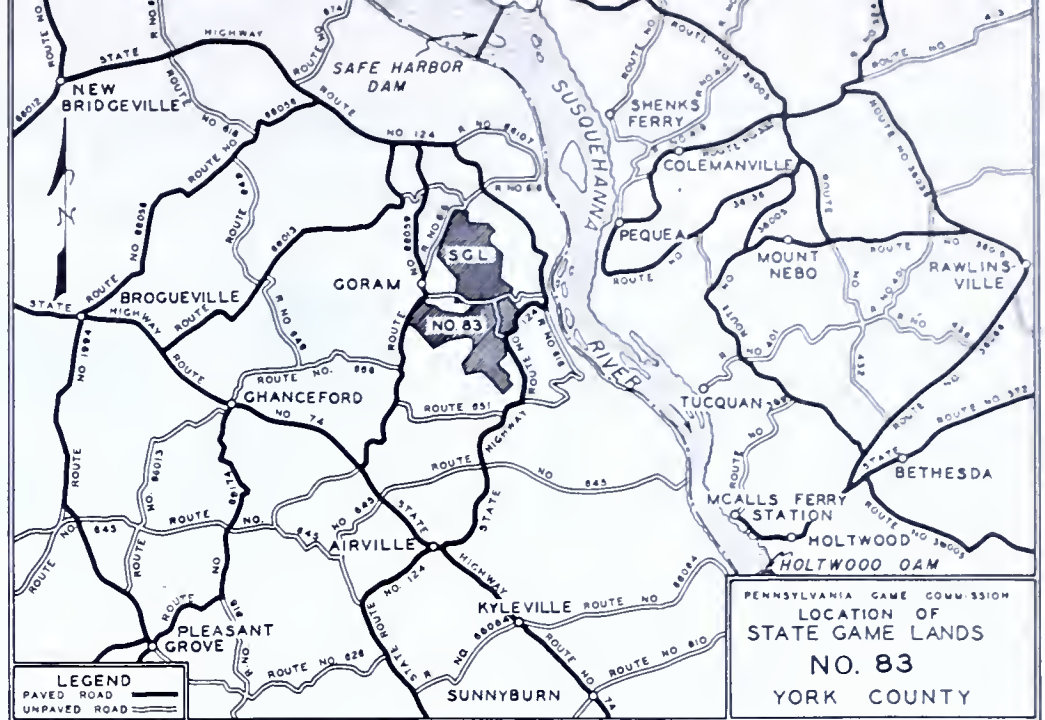
1. In Pennsylvania, when hunting, your license must be worn in plain sight on your back.
2. The downy young of herring gulls are blotched and speckled with dark spots.
3. English "sparrows" are not sparrows at all. They belong to the weaver bird family of Europe.
4. Look at the rifleman's hands. He has one glove off, thrown on the ground, but is it drawn correctly? Not unless he has two left hands.

STATE GAME LANDS 83

Prepared for the Field Management Bureau

By ROY A. TREXLER,

Conservation Education Assistant, "A"



OF ALL the scenic wonders of Pennsylvania, many of our State Game Lands offer unrivaled outdoor views of natural beauty. This is particularly true in the case of State Game Lands 83 in York County, overlooking the beautiful Susquehanna River.

The original purchase of these lands was made in 1933 and later acquisitions raised the total area to 760 acres. The Game Lands are located approximately 12 miles southeast of Red Lion where Highway Route No. 923, running from Airville to York Furnace, passes the tract about a half mile from the Susquehanna.

Of this entire tract approximately 700 acres are woodland. The more common trees are oak, hickory, poplar, gum, elm, white pine and hemlock. This fine assortment of hard and soft woods attracted local timber cutters who have removed 83 cords of pulpwood and 89,000 board feet of saw logs in several small cutting operations. In addition to the harvest of a forest crop, the cuttings opened up the dense canopy and promoted a more rapid growth of low-growing shrubs and vines which provide food for wildlife.

The remaining 60 acres are suitable for farming and most of this acreage is being cultivated. There are 22 contour strips planted to corn, oats and barley. Two of these strips were sown to *Serecia lespedeza* approximately four years ago. This perennial clover produces excellent game food and cover. Another strip was seeded to *Multiflora Rose* by the broadcast method. If this venture proves successful, the seedlings will be used for planting fences, hedgerows and travel lanes in suitable locations. All of the strips planted to grain are share-cropped by local farmers. The Commission's share of the grain is more than enough to supply the sportsmen's clubs of York County with grain for feeding wildlife during winter months.

A complete network of roads and fire trails makes the area accessible from all points. Much of this work was accomplished by W.P.A. workers years ago. This group also built rail fences and planted food-producing shrubs. One example of this type of work was the planting of 5,000 Chinese Chestnut trees, approximately 1,500 of which survived. Today these are quite an attraction, set up in groves and planted along fencerows, roads, and refuge lines. Another remarkable planting is a *Multiflora Rose* hedge which is 500 feet in length and nearly 12 feet high.

This article would not be complete without several historical and human interest stories. These incidents were told by two local residents. The first narrative was in reference to the Confederate drive into Pennsylvania during the Civil War, at which time the local population became concerned about the possible looting of their personal property. After burning the Wrightsville Bridge, the river folks realized that the soldiers would travel along the west bank of the river in an effort to locate food and horses. The farmers needed their horses and decided to hide them. Otter Creek passes through the Game Lands on the old Patterson Tract and makes a 90 degree turn, cutting into a solid stone wall and creating an overhanging shelf of rock. This trick of Nature provided an ideal natural cavity in which to hide the farmers' horses. This historical monument is still in evidence today and is known to all as Horse Rock.

Another interesting story about the Game Lands tells of the group that started to span the Susquehanna River with a stone

trolley bridge. This enormous project was designed to furnish transportation from Pequea to Red Lion. After working four days, the idea was abandoned. According to the drilling and grading, the trolley line would have passed through the Game Lands if completed. The bridge would have been quite an accomplishment, especially when we stop to consider that York County residents today have only the two Wrightsville Bridges along the entire 50 mile river bank.

Another reason for Game Lands 83 being so popular is due to three ideal fishing streams which cross the area. Otter Creek is the largest of these while Furnace and Sawmill Creeks, although not quite as large, are more beautiful because of the rhododendron and hemlock along their banks. Each year the Fish Commission does a fine job of stocking these streams and game lands roads offer easy access to them. Numerous sportsmen take advantage of the area to picnic as well as fish. When fishing along Furnace Run, close to the junction of Sawmill Run, an observant person will notice a stone wall which extends across the stream. This is a very popular spot for fishermen but few realize that this wall formed a dam which at one time operated a mill to card wool. This industry did not last very long and later on the building was used to house a press and still which extracted sassafras oil.

Do you believe in Ghosts? The following story relates how State Game Lands 83 happened to be placed in a "haunted" category. A barn still standing on the tract and the garden next to it are the scene of this supernatural story. Two local men were involved in accidents years ago and in each case the individual lost an arm. These men were very much concerned about the severed members, fearing false pains in later years. They were of the opinion that the arm had to be placed in a comfortable position to avoid any unnecessary cramping. In each instance the severed limb was washed and properly wrapped. It was then placed in a straight and firm position, boxed, and buried in the garden. Hence the belief that the place is haunted.

With all the open territory on the area, it was necessary to provide protection in the form of refuges. Two of these were established on the Game Lands. Farming is practiced on both refuges and the agricultural methods promote ideal habitat for rabbits, quail, and pheasants. Nesting is in evidence on all the cultivated strips. Years ago, the W.P.A. workers received numerous species of food-producing plants from the Soil Conservation Service nurseries. Today you can see these shrubs on a large experimental area within one of the refuges. The results of the planting were most gratifying and today wildlife uses the area extensively.

It is rather interesting to note the numerous charcoal hearths on these Game Lands. At an earlier date these hearths provided fuel for warmth, industry and transportation. Now we find that the soil beneath them is ideal for growing grape, dogwood and greenbrier, all of which provide very fine game food.

When traveling across the Game Lands, one cannot help but notice the large towers which support the Pennsylvania Water and Power Company transmission lines. This line runs due north and south across the entire area. The company does extensive mowing and trimming each year which provides an ideal fire-break. It is possible to travel this strip by car in some places.

AMENDMENTS TO THE GAME CODE APPROVED BY THE GOVERNOR LEGISLATIVE SESSION OF 1949

Section 302—Resident License Fee (Act 51, approved April 6, 1949, and Act 271, approved May 9, 1949).

Increases the resident hunting license fee from \$2.00 to \$3.15, effective September 1, 1949.

Provides for free hunting licenses to resident disabled War veterans who have lost one or more limbs, or the use of one or more limbs.

Section 303—Nonresident HUNTING OR TRAPPING, and Alien Nonresident License Fees. (Act 271, approved May 9, 1949).

Increases the fee for nonresident hunter's license from \$15.00 to \$20.00, and establishes a new nonresident trapper's license at a fee of \$25.00. The trapper's license can be issued only upon application to the Commission in Harrisburg.

Section 311—Agents to Collect and Remit License Fees; Reports; Compensation. (First Paragraph only, amended). (Act 271, approved May 9, 1949).

Increases license issuing agents' compensation as follows: Resident Hunter's License, from 10c to 15c; Nonresident Hunter's License, from 25c to 35c. **AMENDMENTS EFFECTIVE MAY 9, 1949.**

Section 408—Propagating Permits (Act 56, approved April 8, 1949).

Corrects an error in the law concerning the size of mesh to be used by propagating permittees, so that the *maximum* mesh for woven wire fencing shall be two (2) inches.

Section 409—Disposing And Removing Game From Propagating Premises. (Act 56, approved April 8, 1949).

Changes the method of tagging propagated game or eggs by eliminating the triplicate tag and replacing it with a single tag to be supplied by the Commission at cost. Requires the single tag to be attached to each dead bird or animal, or to each container of live birds or animals removed for restocking purposes, regulated shooting grounds, or field trials. Also requires a similar tag to be attached to each container of eggs. All other live birds or animals removed must be individually tagged. Requires permittees to maintain complete records for two years.

Section 410—Regulated Shooting Grounds. (Act 56, approved April 8, 1949).

Adds bobwhite quail, of the subspecies approved by the Commission, to the game birds that may be killed on regulated shooting grounds.



Section 411—Shooting Restrictions on Regulated Grounds. (Act 56, approved April 8, 1949).

Adds bobwhite quail, of the subspecies approved by the Commission, to the game birds that may be killed on regulated shooting grounds.

Section 412—Tagging Birds Killed; Retriever Trials. (Act 56, approved April 8, 1949).

Adds bobwhite quail, of the subspecies approved by the Commission, to the game birds that must be tagged before removal from regulated shooting grounds.

Section 417—Permits for Roadside Menageries. (Act 331, approved May 11, 1949).

Excludes from the definition "Roadside Menagerie," and removes the necessity for a permit, for any animal exhibition at a county fair; also, with Game Commission approval, removes permit requirement for any such exhibition elsewhere when sponsored by a sportsmen's organization.

Section 419—Penalties (Special Permit Violations). (Act 56, approved April 8, 1949).

Provides penalty (\$25.00) for failure to maintain proper records of propagation transactions, and \$25.00 for failure of special permittees to submit annual reports.

Section 501(d)—Open Seasons (Antlerless Deer). (Act 221, approved May 2, 1949).

Changes antlerless deer abrogation proceedings by requiring the signatures of residents of a county equal to 51% of the number of resident licenses issued to residents in the county during the previous year. Unlicensed farmers and orchardists are also permitted to sign the petitions, to meet the required 51%.

Section 506—Penalties (Bear). (Act 66, approved April 14, 1949).

Increases bear penalty from \$100 to \$200. **EFFECTIVE APRIL 14, 1949.**

Section 720—Permits for Field Trials. (Act 87, approved April 14, 1949).

Extends period for holding field trials, under permit, for dogs working on wild game, to include the full month of April. (Formerly April 1 to 15.)

Section 731—Penalties (Bear). (Act 66, approved April 14, 1949).

Increases bear penalty from \$100 to \$200. **EFFECTIVE APRIL 14, 1949.**

Section 938—Special Dog Training Areas. (Act 540, approved May 26, 1949).

Increases from four to six the number of permits for Special Dog Training Areas that may be issued in any one county. **EFFECTIVE MAY 26, 1949.**

Section 943 (h)—Bear Penalty. (Act 66, approved April 14, 1949).

Increases bear penalty from \$100 to \$200. **EFFECTIVE APRIL 14, 1949.**

Section 1004—Bear Penalty. (Act 66, approved April 14, 1949).

Increases bear penalty from \$100 to \$200. **EFFECTIVE APRIL 14, 1949.**

Section 1202—Legal Procedure; Reimbursement to Counties for Prisoner Maintenance. (Act 108, approved April 18, 1949, and Act 119, approved April 18, 1949).

Requires Game Commission to pay counties one dollar (\$1.00) per day for maintenance of prisoners who have been imprisoned under the provisions of the Game Law.

Section 1203—Acknowledgment of Guilt. (Act 119, approved April 18, 1949).

Clarifies legal procedure on field acknowledgment of guilt by eliminating offenses designated as misdemeanors or felonies from those which may be settled on field receipt.

Section 1206—Search Warrants. (Act 108, approved April 18, 1949).

Requires the Game Commission to pay all costs when no birds, animals, firearms, or dogs are found on a search warrant.

Section 1210—Bond and Appeals. (Act 119, approved April 18, 1949).

Clarifies legal procedure by designating the court of common pleas for certiorari proceedings, and the court of quarter sessions for appeals.

Section 1401 (v)—Special Fund for Game Lands—Repealed. (Act 153, approved April 21, 1949).

Eliminates the earmarking of 75c from each resident hunter's license, for the purchase, maintenance and development of State Game Lands and Refuges.

Section 1401 (z)—Appropriation from Resident Hunters' License Fees. (Act 271, approved May 9, 1949).

Earmarks the sum of \$1.25 from each resident hunter's license fee, for: Improving natural food and cover for wildlife; the purchase, planting, etc., of game foods for feeding wildlife; the purchase, trapping and distribution of game; and the protection of property of farm-game cooperators. (Effective May 9, 1949).

Fixed Charges

Act No. 566, approved May 27, 1949, and effective September 1, 1949, increases fixed charges from 5c to 7½c per acre, annually, on lands to which title has been taken in the name of the Commonwealth, for use of the Game Commission as follows:

From 1c to 2½c per acre, payable to the county in which the lands are located;

From 2c to 2½c per acre, to the respective school districts; and

From 2c to 2½c per acre, for the benefit of roads in the townships affected.

(This Act does not amend the Game Law, but affects the Forest Reserve Law of May 17, 1929, P. L. 1798.)



Bills Affecting the Work of the Game Commission Vetoed by the Governor

Senate Bill No. 756

This bill would have repealed the present law requiring unloaded guns to be in a case or securely wrapped while being transported at night; it would also have permitted the carrying of loose ammunition in broken cartons or other unwrapped containers. Governor Duff in vetoing the bill said, "A serious problem constantly confronts our law enforcement officers in the apprehension of persons killing or attempting to unlawfully kill both small and big game by 'cruising' in automobiles at night. The present bill, if approved, would emasculate our enforcement arm and open the door for widespread violations."

House Bill No. 137

This bill would have inserted in Section 905 of the Game Law a provision increasing the fixed charges on State Game Lands and other commission-owned real estate from 5c to 10c per acre. The Governor in his veto message said: "In the absence of some evidence, therefore, which would indicate that State forest and game lands do constitute an undue burden upon county taxpayers, I am disinclined to increase their cost to the Commonwealth or to the Pennsylvania Game Commission beyond that which is now fixed by law."

House Bill No. 254

This bill, though not an amendment to the Game Law, is of interest to hunters in that it would have protected hunting camp site leases on State Forest lands for a period of 50 years against cancellation for any reasons except for the nonpayment of rent or when



the site is required for some public or departmental use. The Governor in vetoing the bill said: "Under the general provisions of this bill, all control of the Commonwealth would be lost relative to the use of the buildings; thus a cabin might well be used for any illegal purpose whatever, and yet the Commonwealth would be powerless to cancel the lease. The bill also provides that temporary buildings shall not be used for permanent residential or commercial purposes, yet if they were so used, the Commonwealth would be powerless to cancel the lease or take any steps for the correction of the situation other than through the courts."

"Forest and park lands belong to the people of the Commonwealth and thus it becomes the duty of the government to protect the lands for the general use of the public at large. The provisions of the bill would be exactly opposite this philosophy."

House Bill No. 260

This bill would have established a Retirement System for Pennsylvania Game

Protectors whereby they would have received a special benefit upon retirement of approximately 33% more than under the present System. Governor Duff in his veto message pointed out that the General Assembly in the closing days of the session of 1949 adopted a resolution authorizing the Joint State Government Commission to make necessary studies of occupational hazards of certain State employees, and report its findings to the next session of the General Assembly. "It would seem, therefore," he continued, "that although this bill passed both Houses in the closing hours of the General Assembly that the legislators felt the matter should be given further study. . . . I regard this resolution as a mandate from the Legislature that I should not act in haste, in consideration of this bill."

House Bill No. 486

This bill would have extended the dog training season so that it would have opened August 1 instead of August 20. It would also have extended the time for training dogs from 9:00 to 10:00 P. M., Eastern Standard Time. In his veto message, the Governor said: "It is necessary for the Game Commission now to go into other States and areas to purchase small game at increased costs, and the period which this bill would extend the training season is exactly the time these animals are very young. Until the present decreasing scale of small game population shows a tendency to fundamentally change, it seems unwise to extend the dog training period into the seasons when the small game are in the period of natural increase."

THE INDESTRUCTIBLE CHUCK—from Page 8

Weaver scope leaning against a tree and a large chuck on the running board of the car. The hunter, who was from Elysburg, said he'd gotten another one that afternoon but there hadn't been enough left to pick up. That happens sometimes with these hopped-up calibers. We spent almost an hour talking guns during which time our friend missed a shot at about one hundred and seventy-five yards. He probably would have connected if he'd been alone but it seems just when a fellow tries the hardest, he misses the most.

It was getting late so we pointed the car toward home. On the way we had to pass the spot where I'd missed the first one so we drove slowly and spotted him again. "Boy," I thought, "I'm going to get you this time!" With just his head and neck visible, I had no choice but a head shot. The Lee Dot just about covered the target but I held it as hard as possible and touched her off. At the rifle's crack the chuck flew up in the air again and landed on his back. But this time he stayed put. We drove up a dirt road a little way so it wouldn't be necessary to cross the field of oats and I got out to collect the kill.

As I walked over to pick him up, I congratulated myself on making this shot.

"After all," I thought, "a chuck's head isn't too big at two hundred yards even through a six power scope, and he was wary from being shot at earlier today." I could see him lying a few yards from his hole. "A big, old fellow, too. Probably as tough as a boot sole." I was about eighteen paces from him when he flipped himself onto his feet, gave me one startled glance, and dove head-first into his hole! I can't imagine what kind of glance I gave him! I just didn't believe it, that was all. "Maybe there were two chucks," I thought vaguely, "This one was just playing or something." Of course, I realized this was silly even as it occurred to me, but I circled the area anyway looking for I wasn't just sure what. Finally I went back to the spot where the chuck had lain. There wasn't a spot of blood anywhere but there was that little crater where the bullet had hit. Must have been just under the chuck's head, the concussion knocking him out. I don't know what would have happened if I'd gotten there a minute sooner and picked him up. Never had a live chuck by the tail!

The next afternoon found me parked where I could take a shot if the chance presented itself, searching that clover patch with the binoculars. By now it was almost

as familiar as my own back yard. After a wait of about twenty minutes had produced nothing, I got restless and decided to ride up the river a few miles to another spot where I'd often seen chucks.

Going home that evening I again saw the chuck in the clover patch. I put a couple of cartridges in the magazine in case I should hit him only to have him run again. By now I was almost convinced he was bullet-proof. He was feeding and hadn't seem me yet so I got in a good solid position, found him in the scope, and whistled softly. Immediately, he sat up looking for the source of the sound. The bullet slammed him down and I saw his tail wave at last. I ran another load in the chamber and waited a minute to be sure—but he didn't move. Walking over to pick him up, I saw that the bullet had gone through his shoulders.

But it wasn't the same chuck! This was only a medium sized fellow and not the big old-timer that had been giving me such a hard time! Don't ask me where the old fellow is now. He's probably too gun-shy to come out during the daytime or maybe he's still nursing a headache. I don't know. Even if I did, I wouldn't shoot him now. He's too much fun alive!



Jack Haney of South Bend was told by the daughter of Roy Coleman that there was a den of foxes on her father's farm and that she had seen two of the kits. A few nights later Jack took his shotgun and watched the den. After about an hour he saw a fox coming in to the den with a grey squirrel in its mouth. He shot the fox and as the fox fell, he let go of the squirrel which immediately ran off into the brush. Apparently the squirrel was not hurt because an examination of the area showed no sign of it. The fox proved to be a dog and Jack is still waiting to shoot the female. One kit has been captured also.—Game Protector H. E. Greenwald, East Vandergrift.

Deputy Game Protector John E. Nulph, New Bethlehem, reported to me that he noticed a cock ringneck jumping up and down in the grass near the edge of a field which Nulph was plowing on Game Lands 137 in May. Getting down from the tractor, he walked over to the ringneck and found that it was just completing the killing of a five foot blacksnake. The ringneck finished the job and strutted away as the man watched. Deputy Nulph stated that the snake was badly mangled around the head and that the ringneck had done a good job. He also reported that while farming on these Game Lands, he has noticed a number of rabbit nests containing young, as well as several ringneck hens setting on nests during the month of May.—Game Protector W. J. Brion, Kittanning.



Along Raccoon Creek in Washington County stands the largest tree in Pennsylvania. This tree is a sycamore and is on Farm-Game Project 172, which belongs to Farm-Game Cooperator Thomas C. Bigger. I took the following measurements of the tree with the help of Deputy Game Protector Carl Cain: Circumference 18 inches above ground—34 feet; limb spread, north and south—165 feet; and limb spread, east and west—98 feet. The height was not measured but it is at least 100 feet.—Game Protector David W. Heacox, Clinton.

On May 24th I found a large rabbit which had been killed on Highway Route 104. The carcass was still warm and upon opening it, found it had eight small rabbits that would have been born in about three or four days. This may be one answer to the questions many hunters ask about why they see so many rabbits in spring and early summer and what happens to them by fall.

The same day on State Game Lands 194 I heard an old crow calling in the woods. Creeping through the brush in the direction of the call, I saw a crow on a limb. When I shot, it made a lot of noise falling through the brush and upon investigation, I found three crows—two about one size and one a little larger. I believe the old mother bird was teaching her two young to fly and was sitting alongside of them on the limb.—Game Protector Raymond E. Holtzapple, Middleburg.

I received a call for a lady in Circleville in May informing me that a stray cat had killed a setting pheasant hen near her home. She told me that she placed the eggs on a damp towel and put them in her electric oven, placing the thermostat at its lowest setting. I thanked the lady for her thoughtfulness, hung up the phone, and thought just how stupid she was. She now has my humblest apologies because two days later ten healthy chicks hatched from the thirteen eggs. The other three were infertile. I have the ten chicks in a small brooder. They were two weeks old on May 4 and all doing well.—Game Protector Carl E. Jarrett, New Stanton.

On May 15 I established a blind near a wood duck nesting box on a beaver dam in Bradford County with the intention of getting moving pictures of the ducklings when they left the box. It was during one of these days of watching that I witnessed what to me was a rather unusual spectacle.

Directly back of the tree on which was located the nesting box I heard quite a commotion and presently, to my surprise, I saw a large groundhog climbing up a ten-inch hemlock tree in the same manner as a squirrel. His claws going into the bark made a sharp rasping noise. The tree was perfectly perpendicular and the "chuck" ascended to a height of about twenty feet and then crawled out on a limb at right angles to the trunk. Here he remained for several minutes, then turned around on the limb, his head facing the trunk of the tree and descended in the same manner as he went up. Previously I had heard of chucks climbing up on fence rails and posts and saw several climb up low inclining limbs of trees, but this is the first time I ever saw or heard of one going up a perfectly straight tree to such a height. The feat was accomplished without too much apparent effort on the part of the chuck.—John S. Shuler, Conservation Education Assistant, Williamsport.

During the month of May I was told of a small bear weighing approximately 100 pounds that had been robbing a garbage can at a house in Monroeton frequently during the winter. It was noted that the can was being pilfered but at first the identity of the thief was not known. On one occasion, however, it was noted that meat scraps were passed up in favor of a portion of huckleberry pie. That was the first indication of the robber's identity. Later tracks were seen and one morning the lady of the house saw the bear at the head of an outside stairway engaged in raiding the garbage can as usual. No other mischief was reported. This bear was seen crossing the street of Monroeton one night about 2:30 a. m.

At one place on State Game Lands 12 deer have consumed approximately 500 pounds of salt during the past three months. I have found definitely that the practice of putting out salt for deer tends to keep down damage to farm crops. One farmer, who has always suffered heavy damage, reports seeing very few deer on his farm this spring. I have noted this same situation in other locations as well.—Game Protector Martin L. Shaffer, Leroy.





One day during May I was driving along a dirt road near West Lebanon and rounding a curve, saw a red-tailed hawk leave the road with about a five foot blacksnake. I don't know whether the hawk had killed the snake before I approached or whether it just swooped down and grabbed it. At any rate, this hawk deserves more protection than it sometimes gets and any bird so bold and brave as to kill this black predator deserves a lot of credit. Only a few weeks ago a farmer told me of finding a grouse nest with seven eggs in it. About a week later he went back to see if the eggs had hatched and found a blacksnake eating the last egg. Needless to say, that snake will never eat another egg.—Game Protector Bruce Catherman, Indiana.

On Memorial Day I received a telephone call from Mr. Harland J. Rue of Barnes to the effect that he had a deer fawn at his place which had been pretty badly chewed up by dogs. The boys at his place had carried it in from the woods. The most interesting thing to me was the method the boys had used to transport the animal. They had constructed a stretcher by cutting two saplings and then had wrapped their sweat shirts over the two poles. I asked the youngsters if they were Boy Scouts and they said they were. Knowing something like how to make an emergency stretcher is sometimes valuable in not only saving human life but wildlife as well.—Game Protector William R. Overturf, Marienville.

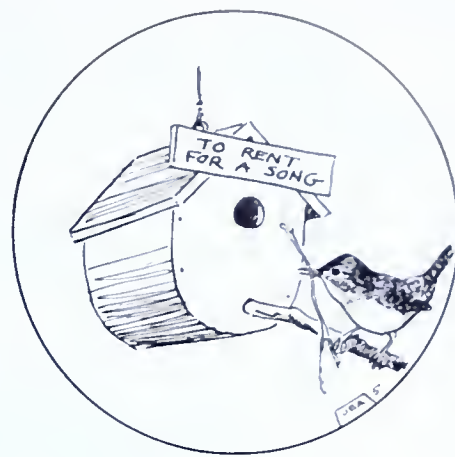
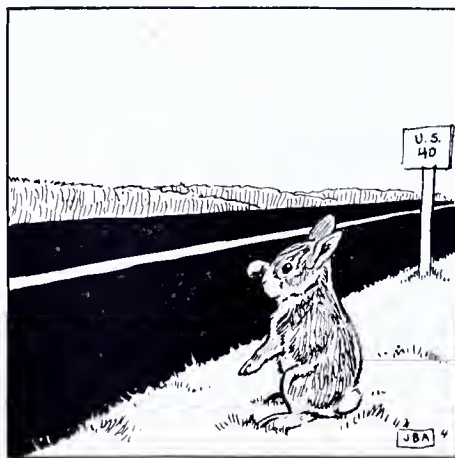
It is almost unbelievable to comprehend the number of dogs that have been and are still running at large in this district. Some of these dogs, though quite gentle and harmless in appearance, are nevertheless very destructive when not under control. I am continually receiving reports of dogs chasing and destroying wildlife and doing an untold amount of property damage. Recently a pack of these dogs got into a local farmer's pasture during the night and by morning had managed to kill and partly devour a mature pony.—Game Protector Samuel B. Shade, New Castle.

While gathering safety zone stakes on a Cooperative Farm-Game Project I came to a stake which had blown over onto the soft wheat field ground. Beneath the sign or crossboard of the stake a rabbit had a large form hollowed out. Above the rabbit's head in bold red letters was the notice, "Safety Zone." I ask you how clever can these little carrot eaters get?—Farm-Game Manager Richard H. Hamm, Hanover.

Recently I met a Mr. Eddie Stakes from Mt. Union. Mr. Stake had formerly been the blacksmith on a W.P.A. project on State Game Lands 99 but for the past several years he has been a fireman on the Pittsburgh division of the Pennsylvania Railroad. In swapping experiences and renewing memories, we got to talking of game feeding in the winter months. Mr. Stakes related that he and his engineer as well as trainmen on other trains would gather up grain spilled from boxcars while making up a train in the Pitcairn yards. Then, on the run between Galitzin and Pitcairn, they would toss packages of grain from the train at selected spots. He commented on how surprising it was to see the amount of wildlife which found these improvised feeding stations.—Game Protector William Lane, Hustontown.

The clearing and plant of food plots on Game Lands 52 has been in progress since May 12. The heavy trees and stones were removed by a bulldozer during the winter. Some of the areas in which we are working have not been planted for the past 35 to 40 years. After all the roots and stones were removed and the ground was plowed, the soil seemed to be of a fairly good quality. We are hopeful that with the planting of these plots, it will no longer be necessary for small game species to carry a "knapsack" of food before they venture onto this land. The workmen report they have seen a great number of rabbits in the vicinity while on their way to work in the morning. Perhaps this is proof that restocking in areas removed from the hard-surfaced roads where cover is abundant is a paying proposition. Sportsmen who live in the vicinity have also reported a marked increase in the grouse population.

On May 25 I was traveling north on the Philadelphia Pike, Route 422, and saw a young rabbit run up to the edge of the highway about 5:45 p. m. This is just at the time when the highway is crowded with autos carrying persons home from work. This young rabbit evidently had a wise mother and a good memory because it stopped at the edge of the highway, took a quick look in either direction, and made a bee-line for the opposite side of the road at an opportune moment. It timed its trip so as to just cross ahead of a huge trailer truck which was coming down the road.—Game Protector Joseph A. Leiendecker, Reading.



On May 6 I erected a wren house in an apple tree in the backyard of my home but with little expectation of attracting nesting birds since I had neither seen nor heard a wren in this vicinity for the past two years. In less than 15 minutes after I had removed the ladder, however, a wren alighted on the perch in front of the opening, inspected the house from stem to stern, inside and out, and immediately began to carry twigs and bits of grass for a nest.

On June 1 a young turkey hen was observed in the refuge on State Game Lands 51. It was mothering just one lonesome little chick. Clutches of fifteen or more are not unusual but this is the first time I have seen a turkey hen with just one youngster.—Game Protector Thomas W. Meehan, Uniontown.

One day in March two men who work on a saw mill in Indiana County were out on the job cutting a very large hemlock tree. Neither of them took notice of what was in the top of the tree but, finally, after the tree was felled, and they had moved around to the top of the stem, they found a large nest. Upon investigation they found it contained two great horned owls just about ready to leave the nest and parts of a full grown rabbit and full grown pheasant. Nothing but the best for these "birds."—Game Protector G. A. Miller, Spangler.

During the month of May I sent one gray fox head into the Bureau of Animal Industry for examination. A diagnosis of rabies was made there. With the entire New York state border well "salted" with the virus of rabies and the large numbers of stray dogs in Matamoras and Milford, it is very possible that we will get an outbreak of this dread disease in this section of the County with the advent of hot weather.—Game Protector John H. Lohman, Milford.

On Sunday, May 15th, I received a radio call from Chief of Police Chapman of Montgomery Township reporting that dogs living wild in the section were killing game and also attacking boys walking along the roads. I went to his assistance and we hunted the wild beasts down and also cleaned out their dens and pups. The dogs were holing up in an area close to an old well and the ground there was covered with parts of rabbits and pheasants.—Game Protector George W. Freas, Horsham.



CONTROL OF THE GUN DOG

By HERBERT KENDRICK

THE MOST irritating experiences in the field of hunting can be caused by a disobedient dog. The superlative glory of gunning is completely spoiled for the dog and his master if obedience has been omitted from the dog's training. Of all the tasks facing the dog handler, perhaps teaching his animal to obey him is most important. Gun dogs can cause you to grow grey prematurely if they jump up and place muddy front feet on your guests, or refuse to come in when they are called, climb over you in a restless manner when you're driving your car, and generally refuse to obey your commands.

To simplify the tasks of teaching obedience or anything else for that matter, the handler must be thoroughly conscious of his dog's limited powers of understanding, be kind, patient, thoughtful and possess the animal's complete love and confidence. If the teacher is rough, loses his temper and punishes the pupil too harshly, it is highly possible the dog will not understand what he is expected to do and the entire lesson will end in confusion.

It is perfectly natural for a dog to want to jump up on his master and show his affection by getting his nose as close as possible to a man's face. However, it is an annoying habit and can be cured without difficulty.

When the dog approaches and puts his paws on you, hold them in one hand and speak affectionately. At the same time, firmly press your foot on his rear toes. This gentle pressure will cause him to quickly get down and yet he cannot feel that you have mistreated him. When he is on all fours, reach down and pat him. A few lessons in this manner will break the habit and there will have been no breach of friendship between the dog and you.

Howling and barking are unnecessary habits that can be corrected quite easily if treatment is applied early and continued long enough. Chain the dog to its house and leave him alone until he starts the noise, then sneak up behind him, give a command to be quiet and the same time spank him with a rolled newspaper. The shock and simple punishment will clearly show him your displeasure. Repeat the performance until he stops the habit.

Muzzles are used on the persistent ones that ignore simple punishment. Apply the muzzle when he barks, remove it when he behaves and he will soon learn that it is far more comfortable to stop barking than to wear a tight muzzle.

When your dog insists on chasing automobiles, get a couple of your friends to help. Have one drive the car and the other sit low in the back seat with a bucket of cold water. Drive slowly by the dog and when he approaches the car, dash the entire pail of water in his face. The shock and force of the water will make car chasing extremely unpleasant for him and it will take only a few treatments to cure him completely.

(Continued on Page 32)

BASEMENT TARGET SHOOTING

By TED TRUEBLOOD

IN THE March 1946 issue of THE PENNSYLVANIA GAME NEWS this column was devoted to a discussion of dry snapping as an aid toward becoming an expert pistol shot. In this form of practice the unloaded gun is snapped at a target just the same as if it were loaded. If proper attention is paid to form, holding and trigger squeeze and each "shot" is let off as nearly perfect as possible a great deal of progress can be made. Most really good pistol shots practice dry snapping regularly, particularly if they can't visit a range every few days.

The chief advantage of dry snapping is that you can do it anywhere. Your basement or living room is just as good a range as any. The drawback is that it isn't any fun. It is simply practice so it soon gets to be work. Nobody likes to work.

Another form of practice which also has the great advantage of being possible any evening at home was "discovered" last winter by my friend Jack. His system is fun. He bought an air pistol—.177 caliber with rifled barrel—and set up an informal target range in his basement. He thought it would give him a chance to practice whenever he felt like it.

To his surprise, he discovered that all the male guests—and a lot of the women—made a bee line for the basement almost as soon as they got into the house. Everybody enjoyed shooting the air pistol. He placed some chairs and an old davenport along the sides and across the back of the room for the spectators. A friend who runs a print shop made up a thousand targets and fixed a simple bullet trap to mount them on.

Groups of four or five can take turns shooting, and each man ordinarily is allowed to finish his string of five shots before relinquishing the gun. Since the range is only about 15 feet long the bull is small—about half an inch in diameter—and the four rings around it are half an inch apart. A shot in the black counts five. The rings are numbered from one to four.

The difference between shooting an air pistol and dry snapping is that with the air pistol you actually score each shot. In dry snapping nothing happens. It is much more fun to punch a hole in the target than merely to think, "I had a perfect hold on that one," or "I pulled off a little at four o'clock this time." There also is the added incentive of competition when two or more are shooting.

Of course, the important question is whether practice with an air pistol is worth while. Will it actually improve a man's scores on the range with his .22, .38 or .45? Jack's experience has been that it does improve them to a surprising degree.

There are a number of reasons, but the foremost probably is in the development of a uniform hold. Any handgun is sensitive to the manner in which it is held. You have to grip it the same from shot to shot if you expect to put them in the same

(Continued on Page 32)



John J. Slautterback Retires

A dinner was given for John J. Slautterback, retiring Land Agent of the Pennsylvania Game Commission, on June 16th, near Harrisburg. It was enjoyed by nearly one hundred co-workers and friends of the honored guest and his wife.

John and Mrs. Slautterback listened to reminiscences by several of the Commission employees, people who have worked with John in the field and at the Harrisburg office.

Tom Frye, Executive Director of the Game Commission, commended the retiring official for his untiring, productive efforts in behalf of wildlife betterment. Mr. Frye expressed the sentiments of all present in wishing John and Mrs. Slautterback the very best of health and happiness in years to come.

A United States Savings Bond was presented the honored couple. Mrs. Slautterback received, also, a beautiful corsage.

Mr. Slautterback is retiring from Commission work July 21st of this year. He joined the game organization as Game Protector in charge of Mifflin, Juniata and Snyder Counties on May 20, 1915. On August 15, 1919, he became Acting Field Superintendent of the state's game refuges. On October 15, 1919, he was appointed Traveling Game Protector (comparable to present-day Division Supervisor), Division "D".

Mr. Slautterback was called to Harrisburg May 1, 1924, to become Chief of the Bureau of Vermin Control. This position he held until January 1, 1929, when he was made Executive Secretary to the Board of Game Commissioners. He resigned from this position July 1, 1931.

For several years thereafter, Mr. Slautterback worked for the New York State Conservation Commission, under the Federal Public Works Administration. He returned to the Pennsylvania Game Commission May 16, 1939, as Principal Game Lands Technician in Division "B".

Mr. Slautterback served in acting capacity as Supervisor of Division "G" from late summer, 1945, until July 1, 1946. He then returned to Harrisburg to take over duties as Land Agent under the Titles and Record Unit, which position he held until retirement.

'47 Big-Game Census Shows 7 1/2 Million Animals in U. S.; Sportsmen Kill 891,200

The annual big-game inventory for 1947 listed 7,758,900 animals in the United States, the U. S. Fish and Wildlife Service of the Department of the Interior has announced. The Service also disclosed that the 1947 big-game animal kill totalled 891,200.

The figures are compilations made by the Service of estimated big-game populations and kills submitted by the state wildlife conservation agencies. Inventories of big-game animals on national forests, parks and wildlife refuges are included in the state estimates.

Deer greatly outnumber all other big-game animals in the 1947 inventory. White-tailed deer were estimated at 5,146,300; mule deer—1,525,200; Columbia black-tailed deer—427,700. Other species: elk—194,600; prong-horned antelope—181,200; black bear—131,900; peccary or javelina—100,700; moose—17,900; mountain goat—12,900; Rocky Mountain bighorn—8,900; desert bighorn—5,100; bison—3,700; European wild boar—2,000; grizzly bear—811; and caribou—25 (which straggled across the Canadian border into Montana and Idaho).

Wisconsin ranked first in the 1947 big-game populations, with 902,700 animals,

(Continued on Page 28)

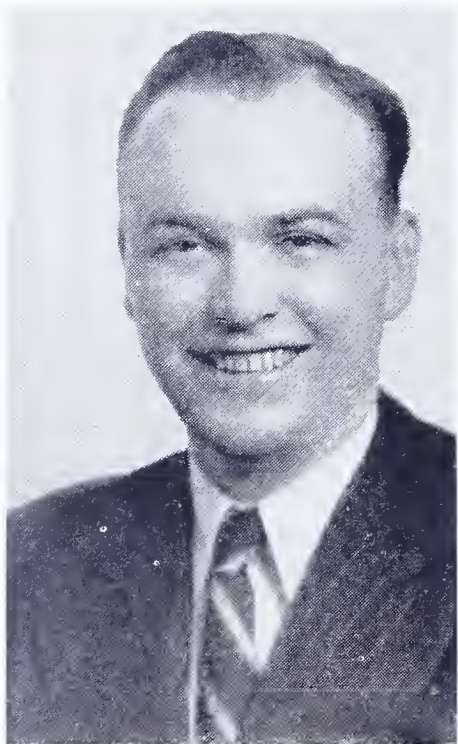


On May 1, 1949 Game Protector Bruce P. Yeager in charge of District C-15 with headquarters at Northumberland completed twenty-five years service with the Pennsylvania Game Commission. Mr. Yeager has carried on his work these many years in a manner that has earned him a host of friends and today he is a highly respected citizen of his community.

Cost of Illegal Hunting Soars

Judge Dal M. Lemmon of the Sacramento, California, Federal Court meted out the heaviest punishment on record for a violation of the Migratory Bird Treaty Act when he sentenced Donald E. Smith of Del Paso Heights, California, to 2 1/2 years in prison and fine him \$2,500, the Wildlife Management Institute reports. Smith had made the serious mistake of trying to sell 829 wild ducks to U. S. game management agents posing as wholesale buyers.

The arrest of Smith climaxed three months of intensive investigations of a huge "duck-legging" ring by the federal men. Albert L. Ford of Yuba City, California, arrested with Smith, was fined \$1,800 and was placed on probation for five years. E. L. Ziegler of Sacramento pleaded not guilty and is awaiting a jury trial. Charles O. Beuchamp, a Sacramento restaurateur, was fined \$385 for buying 50 wild ducks from the outlaws while Paul Young of Los Angeles was fined \$350 for offering to buy 210 ducks. Trials of three others on similar charges are pending.



John R. Langenbach, since 1937 an employee of the Game Commission, left his post of coordinator of Pittman Robertson Projects in the Land Operations Division to become Regional Inspector, North Central State, U. S. Fish & Wildlife Service, on July 1. We wish him the best of luck in his new position.

Farm Ponds Produce More Than Fish

Farm ponds provide havens for more than fish, ducks, and muskrats, the Wildlife Management Institute reported recently. Studies completed by Guy A. Greenwell, game technician of the Missouri Conservation Department, show that properly managed farm ponds are used regularly by at least 11 species of game and fur-bearing mammals and game birds other than waterfowl. Ninety-one ponds were studied over a one-year period. Half of these were being used by quail and nearly all by rabbits. The value of the cover furnished by the growth on the banks of the ponds is emphasized by the finding of heavy use by wildlife of ponds as small as one-quarter of an acre in area.

'47 Big-Game Census

(From Page 27)

nearly all white-tailed deer. Other leading states: Michigan—881,000; Pennsylvania—654,000; Texas—617,500; California—576,600; Maine—331,500; Colorado—308,600; and New York—301,200.

Michigan ranked first in the legal big-game kill figures, with 116,200 animals. Other top states: Pennsylvania—95,600; Minnesota—74,400; Utah—61,200; and Wisconsin—54,300. Counts at checking stations, interviews or questionnaires, wardens' estimates, and license card returns produced the kill figures.

There were no significant changes in the 1947 big-game inventory and kill figures, as compared to the previous year, the Fish and Wildlife Service reported.

Complete big-game population statistics, by state and species, are available in Wildlife Leaflet 321, *Big-Game Inventory of the United States, 1947*, which may be obtained from the Division of Information, U. S. Fish and Wildlife Service, Washington 25, D. C.

Pennsylvania Trappers' Association Holds 12th Annual Meeting

The Pennsylvania Trappers' Association held their 12th annual meeting on June 4th at Big Spring Park, Perry County.

Gene Hill, Delaware County, President of the Association, opened the convention with a talk on the aims and purpose of the organization. Vice President Andrew Ewart, Greene County, and Secretary-Treasurer Lawrence Kopp, Schuylkill County, were given time for remarks. Directors of the Association reported the sentiments of trappers in their respective districts throughout the state.

An open discussion on fur-taking seasons, bounties on predators and other matters of special interest to trappers were considered to completion.

The trappers voiced concern over the decrease in the muskrat population. Considerable thought was given toward recommending a closed season on this valuable furbearer.

The program was keynoted around, "If it's good for fur it's good for the trapper." There was a wholesome attitude toward efforts put forth to maintain a balance in nature. These men realize that the indiscriminate taking of furbearers, or game, without proper attention to predators, only leads to a serious, unbalanced situation.

At this meeting, enthusiasm was ever present. Therein it differed from so many of similar intent that often bog down for lack of sufficient interest. Discussions were carried on with candor but without mention of personalities.

Seven Pennsylvanians Pass Taxidermy Examination

On June 7, 1949, a taxidermy examination was held in the bounty office of the Game Commission at Harrisburg. The law states: "It is unlawful for any person within this Commonwealth to practice taxidermy for profit without a permit issued by the Commission." In accordance with the provisions of the act the Pennsylvania Game Commission established a Taxidermy Examining Board to determine the fitness of these new applicants.

There were seven applicants. All attained a passing grade. Their names and addresses follow:

Frank S. Siepietowski, 168 Newport St., Glen Lyon, Pa.

Lee H. Vogel, R. D. No. 2, Box 39, Leechburg, Pa.

Jacob R. Runkel, Jr., R. D. No. 1, Linglestown, Pa.

William Gurske, 713 Madison Ave., N. S., Pittsburgh, Pa.

Arthur J. Halbe, Linesville, Pa.

James L. Contrillo, Ash St., Central City, Pa.

Joseph S. Bauer, R. D. No. 2, Box 113, Butler, Pa.

The Taxidermy Board consisted of the following members:

Harold T. Green, Chairman, The Academy of Natural Sciences, 19th and Parkway, Philadelphia 3, Pa.

M. J. Kelly, Everhart Museum, Scranton, Pa.

James Kosinski, Carnegie Museum, Pittsburgh 13, Pa.



J. S. Chick Photo

Officials of the Pennsylvania Trapper's Association gathered for their 12th annual meeting at Big Springs Park. Standing, left to right: Ray Zimmerman, Director, District 10; Bill Jackson, Director, District 1; Ed Danko, former Secretary-Treasurer; Ralph Reynolds, Director, District 3; L. J. Kopp, Secretary-Treasurer; Ray Beck, Director, District 2, and Andy Ewart, Vice-President. Kneeling in the foreground is Burt Ewer, Director, District 12 and in the background, Gene Hill, Association President, of Upper Darby. Six other officers of the Association were not present when this picture was taken.



Top: Three week old pheasants on sun porch adjoining the brooder house at Harrisburg Hunters & Anglers farm.
Bottom: Representatives of the Commission and sportsmen's club inspect pheasants being raised under Pennsylvania's day-old chick program.

Over 118,000 Birds Distributed In Pennsylvania's 1949 Day-Old Pheasant Chick Program

Sportsmen of Pennsylvania show an increased willingness to put money and effort into cooperating with the Game Commission in its restocking program. This year 400 clubs and individuals are participating in the pheasant chick program. They will receive nearly 118,000 birds to rear.

In 1945 when the Game Commission expanded its day-old pheasant program, about 46,000 baby pheasants were made available to sportsmen's organization and individuals who had the required equipment. Results attained were so gratifying the Commission increased the program until in 1948 about 100,000 chicks were sent from State Game Farms to sportsmen-propagators. These chicks represented birds the Commission could not raise to maturity with the equipment and money available.

Last year the percentage of day-old chicks supplied sportsmen in each Division compared closely with the percentage of mature pheasants the Commission stocked in each Division.

In the past two years, profiting from experience gained, the assistance of Commission representatives, and a pheasant rearing guide, about 72% of the chicks were raised to maturity—a remarkable record, according to experienced game breeders.

On the basis of last year's commendable record, about 84,000 extra pheasants will be placed in the coverts of the state this fall and next spring, strictly through the efforts of sportsmen. Consistent with the new policy of the Game Commission relative to the time of year mature pheasants will be released, those cooperating in the pheasant rearing program have been asked to hold their hen pheasants until the spring of 1950. For those that do, the Commission will provide one male bird for every ten females liberated next spring.

By holding the hens safely in pens until the approach of the nesting season, many birds that would have been lost over winter will be saved for broodstock. The result will be an increase in the number of shootable pheasants in game season.

A comment from a prominent sportsman recently was to the effect that "There is a steadily growing cooperative spirit between the sportsmen and the Commission that points to better hunting in the Keystone State."

CONSERVATION OFFICERS ALERT

Pennsylvania's Game Protectors follow a hazardous calling, one often involving risks outside those encountered in their regular duties.

Take the case of Carl Jarrett, Game Protector from New Stanton. He received a frantic call from Mrs. William Templeton, two miles distant, about 3:00 A.M., April 13. A man had climbed through a window of the ground floor bedroom occupied by the woman and her husband. Mrs. Templeton wakened her husband. He leaped from bed onto the burglar, forcing him to the floor and holding him there. Mrs. Templeton phoned a nearby police officer. No answer. Then a request for help from State Police at Greensburg, some ten miles away. Her husband was tiring. She called Jarrett, who sped to the trouble scene. There he found Templeton, armed with a shotgun his wife had assembled and loaded at his direction, guarding the prisoner who was still on the floor. Jarrett searched the man. Mrs. Templeton called the Game Protector's attention to a man looking in the window. Jarrett slipped outside. He spotted the man with his flashlight, took him inside and searched him. Two State Policemen arrived shortly thereafter, having been delayed in finding the residence. Officer

Jarrett and Mr. Templeton then went to the front of the house where, in the house-breaker's automobile, they found a third man, too drunk to leave the vehicle. The State Policemen took custody of the trio.

On the night of April 29, George Wilson, 35, a West Virginian, hired a taxi at Conneville. The taxi driver "took for a ride" another hackman. Near Dawson, Wilson drew a revolver, robbed the men of \$25 and drove off with the taxi. About one-half mile distant he smashed into a culvert, badly wrecking the car. State Police and local citizens formed a posse and combed the surrounding territory for the robber, now on foot, but he was not located. The next morning, boys saw a probable suspect limping through a thicket near Dawson. They told Kenneth Durstine, a Deputy Game Protector working under Carl Jarrett. Near where the boys reported seeing the stranger Durstine noticed unusual behavior among crows there. Outdoors training served him well. Assisted by their antics, he located Wilson, approaching him from the rear and ordered him to halt. Durstine searched the man, removing a revolver from his clothing. Wilson and his gun were turned over to State Policemen, who had been notified of Deputy Durstine's pursuit of a likely suspect.

IF YOU ARE BITTEN— from Page 12

and particularly running, may spread the poison rapidly throughout the system and produce undue heart strain. Either, or a combination of the two, may prove the real reason for a fatal result—so *don't run or hurry*.

2. Kill or definitely identify the snake in question. Either of our venomous species has a flat, triangular head, an elliptical (cat-like) pupil of the eye, and a deep pit on either side of the face, between eye and nostril. Specific antivenon, concocted to combat the effect of the poison of the specific snake, rattler or copperhead, is far more effective than the antivenon prepared to neutralize the venom of all poisonous snakes, the species of which is not known.

3. Fasten a tourniquet above (toward the heart) the struck part. Remove the tourniquet every 12 to 15 minutes to prevent gangrene.

4. Sterilize or clean the area over and about the fang marks.

5. Use a pointed, sterilized blade (flame will sterilize the blade). Make cross incisions over each puncture point to the depth of each hole. Be careful not to cut large blood-vessels or, at the wrist, any of the cords on the inner side.

6. Use the suction apparatus. As the virulent poison is diluted by the body lymph, a suction cup will extract consid-

erable of the venom. Mouth suction (spitting out the extraction and saliva to avoid nausea) works well but is not to be considered if there are any cuts on the lips or in the mouth.

7. Walk to your car or assistance. *Do not run.*

8. Go immediately to a hospital or doctor.

If you follow these instructions, you may encounter sickness and discomfort, but you can later tell the story of having been bitten by a snake, and live to tell it over and over.

"JOE BEAVER"

By Ed Nofziger



"The U. S. uses sawtimber one and one half times as fast as it grows back. Maybe you young bucks ought to find another career."

RYEGRASS—from Page 9

so, depending on the viewpoint, is the fact that it furnishes forage, particularly for deer, at a time when available food of any nutritional value is critically low. This may mean the difference between succumbing to starvation or pulling through. Every acre going through the winter bare, or clothed only with dead stubble and weeds, is an acre taken from the larder of wildlife. Evidence of use by deer and rabbits have been observed on ryegrass fields in various parts of the state. Such fields would do much to help the deer endure the hardships of winter, especially where the fields are surrounded by miles of unbroken forests. It is also quite possible that the seed is utilized by songbird and game birds.

Deer were observed feeding on a field of ryegrass in January 1949. The field had supported a lush growth of buckwheat during the summer while the ryegrass struggled for existence under this heavy cover. Liberated by harvest of the buckwheat and aided by moist, cool weather, the ryegrass had produced an excellent stand of "greens." The deer seemed reluctant to leave when approached and snatched several bites before disappearing into the bordering woods. That sea of palatable green grass in the midst of nearly bare woods must have seemed like a heaven-sent oasis to them.

SOIL CONSERVATION DISTRICTS—from Page 6

district creates better wildlife cover, and hence more wildlife. Farmer Jones hears about the facilities of the district through a local newspaper article, a radio talk, by attending a meeting, or talking to some other farmer. Often the state Extension Service representatives, the county agents, have provided this information. Mr. Jones recognizes that one or more of the things offered by the district program will help him. Let us say that he initially thinks he'd like to change a rather steeply sloping crop field from straight line to contour cultivation. Maybe one of those diversion terraces would help stop that washing of soil too, he thinks. As suggested to him, he sends in a card asking for district assistance.

The district board of directors considers his request at their next meeting, assign a priority number for attention. Maybe one of the directors will call on Mr. Jones to discuss his problem and tell him how the district operates. If his farm has not already been covered by a conservation survey, this field analysis is made as soon as possible by a soils scientist loaned to the district by the Soil Conservation Service. With the physical facts about the Jones farm soils, topography, erosion and land use—all interpreted in accordance with land use capabilities—shown on an aerial photo of the farm, the farm conservation planner makes a date with Jones to go over the possibilities of a conservation plan. This farm planner is a professional soil conservationist from the Soil Conservation Service. He and Jones go over the whole farm together discussing each situation field by field. The conservationist points out that the one field that Jones was originally interested in has to be considered in connection with other adjacent fields. In fact, the shape and size of the fields may be changed to advantage because of their physical nature. Furthermore, the expert is able to show farmer Jones many other opportunities for conservation improvements on the farm. Land use changes are discussed. Field rearrangements are considered in light of the economic needs of the farm business—crops, hay pasture—and the capabilities of each piece of land. All the "bag of tricks" in the soil conservation repertoire are suggested to the landowner wherever they would benefit his property and suit his needs. There may be need for contour strip cropping, terracing, cover crops and improved hay mixtures on the cropland; rotation of grazing fields, pasture improvement, a new pond, and multiflora rose hedge fences on the grasslands; exclusion of livestock by fencing and sustained yield harvest of trees in the

woodland. The eroding streambank in the pasture needs protection and planting; two or three little rough or wet spots on the farm should be planted with wildlife cover species; a steep, poor soil piece of the back pasture should be planted to trees; the new pond can be stocked with bass and bluegills and the water fertilized to speed fish growth; the poor crop zone where corn meets woods can best be devoted to a wildlife border of shrubs. These are typical of the points of discussion between farmer Jones and the soil conservationist as they go over the property. Jones sees the merit in a good many of the ideas, but is skeptical of some of them. After all, a lot of new thoughts have hit rather rapidly and he'd like to think about them for a while.

Farm Conservation Plan Includes Wildlife Practices

The conservationist draws up the details of the plan and reviews it with the cooperator when next he sees him. Commitments are included for those portions to which the farmer agrees and the other suggested improvements are included as recommendations. Many of the facilities available to the district may be involved in the arrangements with farmer Jones. An engineering specialist draws up designs for terraces and pond. A game technician from the state wildlife agency completes detailed plans for wildlife management areas, as for example a marsh developed for ducks and muskrats. Technical help in getting wildlife habitat improvement work established may also be provided by the wildlife agency, including some of the needed materials such as planting stock. The state forestry agency supplies trees for reforestation at a moderate price and an expert forester to help Jones with woodland improvement and the harvest of his tree products. Fish to stock ponds of cooperators are furnished to the district by the U. S. Fish and Wildlife Service. The district frequently has heavy equipment suitable for building ponds and terraces which it operates at a reasonable cost to the farmer. All in all Mr. Jones has developed a sound conservation farming system, including good game habitat, with the aid of a team of several professional conservation agencies operating through the soil conservation district.

Wildlife management came to Mr. Jones' farm as a part of a complete and coordinated farm conservation job just as it is happening on thousands of United States farms today—thanks to the operation of the American soil conservation districts.

GAME LAW VIOLATIONS

(All persons listed by county of residence; regardless of county in which violation occurred)

Cases Settled During the Month of May, 1949

ALLEGHENY—\$115

Bartosch, William W., 206 Parkfield St., Pittsburgh. Possessing unloaded rifle not securely wrapped in vehicle on highway between 5 p. m. and 7 a. m.	\$ 10.00
Dickerson, Louis, 4100 Oakdale St., Pittsburgh. Possessing live raccoon without a permit	25.00
Geiger, Ewald J., 1045 Lapis Rd., Pittsburgh. Digging and removing a tree from State Game Lands	25.00
Kearns, John, R. D. 3, Gibsonia. Making a false affidavit date to collect bounty	10.00
McCall, Robert C., R. D. 3, Coraopolis. Killing a raccoon in close season	25.00
Setzenfand, Carl R., R. D. 8, Anderson Rd., Pittsburgh. Making false declaration to date to collect bounty	10.00
Trimber, George, Montour St. Ext., Coraopolis. Training a dog in close season	10.00

BLAIR—\$40

Holby, Earl G., 1810 N. Tuckahoe St., Bellwood. Possessing rifle not securely wrapped in vehicle on highway between 5 p. m. and 7 a. m.	10.00
Hughes, Lawrence E., 106 6th St., Tyrone. Shooting crow from automobile	10.00
Stong, Charles E., Jr., 212 5th Ave., Altoona. Possessing rifle not securely wrapped in vehicle on highway between 5 p. m. and 7 a. m.	10.00
Tremmel, Charles F., Box 101, R. D. 2, Altoona. Making false declaration of date to collect bounty	10.00

CAMBRIA—\$140

Chekonik, Joseph, R. D. 4, Johnstown. Making false declaration of date to collect bounty on two weasels	20.00
Curry, Edward W., 357 3rd St., Colver. Dumping trash on State Game Lands	25.00
Kline, Victor R., Hastings. Fishing in State Game Refuge	25.00
Nealen, Joseph H., Nicktown. Dog chasing game in close season	10.00
Olinick, Andrew, Box 90, Revloc. Failure to tag fur bearing animal (mink) removed from Fur Farm	25.00
Rietacha, Wilfred J., Box 727, Spangler. Dog chasing small game (rabbit) in close season	10.00
Verbosky, Joseph, Box 62, Colver. Possessing loaded rifle in vehicle in motion on highway	25.00

CAMERON—\$120

Reed, Burton L., R. D. 2, Emporium. Making false declaration of date to collect bounty on a fox	10.00
Uber, Claude, R. D. 2, Emporium. Attempting to kill second deer in one season	100.00

CENTER—\$210

Hall, Ray, Jr., Milesburg. Killing a protected bird (gull)	10.00
Rider, Harrison E., R. D. 1, Bellefonte. Wounding a human being in mistake for game	200.00

CLEARFIELD—\$60

Dillen, Blaine, Glen Hope. Making false declaration of date to collect bounty on a fox	10.00
Hurley, Michael, R. D., Leontas Mills. Making false declaration of date to collect bounty on one fox and one weasel	20.00
Maines, Thomas P., R. D. 1, Woodland. Hunting woodchucks in close season	10.00
Savel, Stephen, Pottersdale. Making false declaration of date to collect bounty on a fox	10.00
Sherwood, Ernest C., R. D. 1, Penfield. Making false declaration of date to collect bounty	10.00

CUMBERLAND—\$35

Harrison, Ottoway, Newville. Killing one cottontail rabbit in closed season	10.00
Pierce, Dale E., 5th & Wayne Sts., Summerdale. Shooting within 150 yards of occupied building	25.00

DAUPHIN—\$120

Leedy, Charles R., 414 Muench St., Harrisburg. Attempting to kill big game (deer) with bullet not of expanding type	100.00
Stahl, George H., R. D. 1, Linglestown. Dog chasing game (rabbits and pheasants) in closed season	10.00
Rine, Clarence E., 3 N. Toga St., Rutherford. Dog chasing game (rabbit) in closed season	10.00

FAYETTE—\$45

Jones, Howard L., Smock. Dog chasing game in close season and killing hen pheasant	15.00
Milligan, Wayne O., Adah. Dog chasing game in closed season	10.00
Santella, Dominick J., R. D. 4, Uniontown. Dog chasing game in closed season	10.00
Santella, James S., R. D. 4, Uniontown. Dog chasing game in closed season	10.00

FRANKLIN—\$20

Reed, Samuel G., Doyleburg. Making false declaration of date to collect bounty on one fox	10.00
Varner, Oliver P., Spring Run. Making false declaration of date to collect bounty on a fox	10.00

HUNTINGDON—\$45

Heffner, Clarence F., 1126 Mt. Vernon Ave., Huntingdon. Possessing loaded rifle in vehicle in motion on highway	25.00
Musselman, Jesse R., R. D., Alexandria. Making false declaration of date to collect bounty on one red fox	10.00
Smith, Samuel G., 833 Pennsylvania Ave., Huntingdon. Possessing shotgun not securely wrapped in vehicle on highway between 5 p. m. and 7 a. m.	10.00

INDIANA—\$35

Amalong, Ray, R. D. 1, Indiana. Dog chasing small game in closed season	10.00
Buterbaugh, Lawrence M., R. D. 1, Homer City. Possessing rifle not securely wrapped in vehicle in motion on highway between 5 p. m. and 7 a. m.	25.00

JEFFERSON—\$85

Bower, Robert E., 1201 2nd Ave., Brockway. Using road on State Game Lands closed to vehicular traffic	25.00
Hurd, Leslie F., 122 Penn Ave., DuBois. Possessing unloaded rifle not securely wrapped in vehicle standing along highway between 5 p. m. and 7 a. m.	10.00
Jones, C. Fenton, R. D. 4, Brookville. Using road on State Game Lands closed to vehicular traffic	25.00
Miller, Richard L., R. D. 2, Brookville. Possessing male ringneck pheasant in closed season	25.00

LACKAWANNA—\$135

Davis, Derwood E., Main & Salem Ave., Carbondale. Possessing loaded rifle in vehicle in motion on highway	25.00
Kilmer, Clarence W., R. D. 1, Carbondale. Setting one trap closer than 25 feet from established beaver house contrary to Commission resolution	50.00
Kovaleski, John, 735 Main St., Simpson. Removing sand from State Game Lands	25.00
McHugh, John J., 223 First St., Blakely. Making false declaration of date to collect bounty on a fox	10.00
Puzio, Joseph J., 1254 Franklin St., Old Forge. Raising fur-bearing animals (minks) for commercial purposes without permit	25.00

LANCASTER—\$10

Blizzard, William A., R. D. 1, Drumore. Making false declaration of date to collect bounty	10.00
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LEHIGH—\$10

Sechler, Clark E., 28 S. Howard St., Allentown. Training dog in closed season	10.00
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LUZERNE—\$65

Getz, August, R. D. 1, Sugar Notch. Training dog on small game (rabbits) in closed season	10.00
McNamara, Edward, 89 Mill St., Wilkes-Barre. Depositing rubbish, trash, or garbage on State Game Lands	(Fine remitted)
O'Boyle, Andrew T., 41½ Cemetery St., Plymouth. Dog chasing small game in closed season	10.00
Yuhas, Stephen, Jr., 1026 Main St., Swoyersville. Hunting game within 150 yards of occupied dwelling; failure to show hunter's license upon demand of landowner	45.00

LYCOMING—\$85

Bayne, Margaret, 822 Park Place, Williamsport. Depositing rubbish on State Game Lands	25.00
Irvin, Escoc J., 801 Woods Ave., Lock Haven. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 p. m. and 7 a. m.	25.00
Mayes, George T., 1814 Walnut St., Jersey Shore. Making false declaration of date in attempt to collect bounty	10.00
Vogel, Edward F., 301 W. 4th St., Williamsport. Possessing rifle not securely wrapped in vehicle in motion on highway between 5 p. m. and 7 a. m.	25.00

McKEAN—\$105

Fox, Harvey H., Duke Center. Making false affidavit in attempt to collect bounty on seven weasels	70.00
Himes, Gary W., R. D. 4, Smethport. Fishing in State Game Refuge	25.00
Kilmer, Charles A., Cyclone. Making false affidavit in attempt to collect bounty on two weasels	20.00

MONROE—\$10

Marsh, Fred J., R. D. 3, Stroudsburg. Making false declaration of date to collect bounty on a fox	10.00
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MONTGOMERY—\$10

Kline, Homer K., R. D. 1, Pennsburg. Shooting within 150 yards of occupied buildings	25.00
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NORTHAMPTON—\$25

Stewart, William C., 703 Ferry St., Easton. Fishing from boat in Brady's Lake prior to July 1.	25.00
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NORTHUMBERLAND—\$10

Plotts, Allen R., 125 Carr Ave., Milton. Making false declaration of date in attempt to collect bounty	10.00
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PERRY—\$35

Alexander, Robert C., 212 Maple Ave., Marysville. Dog chasing deer	25.00
Beaston, Glenn J., R. D., East Waterford. Making false declaration of date to collect bounty on red fox	10.00

PHILADELPHIA—\$10

Grove, Julius, 2336 N. 10th St., Philadelphia. Hunting woodchucks in closed season	10.00
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POTTER—\$10

Oles, Leon W., R. D. 2, Shinglehouse. Making false declaration of date to collect bounty	10.00
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SCHUYLKILL—\$10	
Dabashinsky, Joseph B., 436 Adams St., Pottsville. Killing rabbit in closed season	10.00
SULLIVAN—\$25	
Masteller, Herbert M., R. D. 1, Muncy Valley. Depositing garbage on State Game Lands	25.00
SOMERSET—\$20	
Shaffer, George A., R. D. 3, Meyersdale. Making false declaration of dates to collect bounty on two weasels	20.00
SUSQUEHANNA—\$20	
Heater, Russell E., Kingsley. Making false affidavit in attempt to collect bounty on a red fox	10.00
Small, Kenneth, R. D., Montrose. Making false declaration of date in attempt to collect bounty on a fox	10.00
TIOGA—\$35	
Holmes, Marvin O., Elkland. Making false declaration of date in attempt to collect bounty on a red fox	10.00
Kent, Phillip H., Jr., Box 46, Cowanesque. Shooting within 150 yards of an occupied building	25.00
WASHINGTON—\$75	
Catola, Ralph, R. D. 1, McDonald. Training a dog in closed season	10.00
Coen, Clarence C., Wolfdale. Making a false declaration of date to collect bounty on two red foxes	20.00
Maga, Philip, R. D. 1, McDonald. Making false affidavit in at-	

tempt to collect bounty on a red fox killed by another	25.00
Reese, Andrew W., Box 105, Florence. Attempting to kill a groundhog in closed season; possessing loaded rifle in vehicle standing along highway	20.00
WAYNE—\$10	
Upright, Steve C., R. D. 2, Thompson. Making false affidavit in attempt to collect bounty on a gray fox	10.00
WESTMORELAND—\$30	
Barnhart, Lyle, Dorothy St., Derry. Dog chasing small game in closed season	10.00
Johnstown, Orville H., R. D. 3, Irwin. Dog chasing small game in closed season	10.00
Schrum, Regis J., Dorothy St., Derry. Dog chasing small game in closed season	10.00
YORK—\$10	
Smith, Truman M., R. D. 2, York. Making a false declaration of date of killing in attempt to collect bounty on a fox	10.00
NON-RESIDENTS—\$130	
Edge, Warren R., Oakhurst, New Jersey. Hunting without non-resident license	50.00
Leonard, Mark W., Wellsburg, New York. Killing two groundhogs in closed season	20.00
May, Francis D., Wellsburg, New York. Killing one groundhog in closed season	10.00
Soulbay, Harry W., Akron, Ohio. Hunting without nonresident license	50.00

CONTROL OF THE GUN DOG—from Page 26

There are times when it is necessary to ask your dog to lie down. If you train him early he will obey you without hesitation. Take him on a leash, command him, "Down," in a firm manner and at the same time push down on him until he lies down. Do not allow him to arise until you give him the word, "Up." After several lessons, make him lie down long enough for you to leave him alone in a room. Don't expect perfection in one lesson and do not lose your temper when he rushes off and ignores your calls and commands, just so he eventually obeys you, reward him with a tidbit and/or affectionate pats.

By all means, teach your dog to heel. There are times when it is necessary to walk with your dog along the road, on sidewalks or in heavily congested areas, and the man who allows

his dog to pull him along or gets him wound up in the leash, makes an embarrassing situation for himself.

Have the dog walk at your side and give him the command to "Heel." If he walks faster and inches up ahead, rap him lightly with the leash. A limber, keen switch properly applied will keep him in line. Do not allow him to break from you at any time until he is thoroughly trained. He will soon learn you expect obedience; he learns what you want him to do and he wants to please you.

A dog's greatest pleasure is the praise and affection from his master and the task of dog training would be greatly simplified if more trainers would spend more time showing the dog what they want and less time in harsh, rough punishment.

BASEMENT TARGET SHOOTING—from Page 26

place. More or less pressure or a shifting of the hand up or down will change the center of impact.

An air pistol, especially one of those in which a powerful coil spring is released to drive a cylinder (which compresses the air that propels the bullet) forward, is much more sensitive to changes in hold than any powder-burning handgun I have shot.

The sights on these pistols are adjusted to compensate for the jump of the gun as the spring is released. Some of them are capable of very good accuracy—half-inch groups at 25 feet—but if they are not held the same from shot to shot the bullets will go all over the target. A tight, hard hold will cause a low shot and a loose one will result in the pellet going high.

Because the hold is so important with an air pistol, one soon learns to be extremely careful to keep his grip uniform. This habit, of course, results in higher scores with a "real gun."

Another thing the air pistol helps a shooter to develop is a careful letoff. Several of them have a trigger pull that is surprisingly good, but a yank or jerk throws them off the same as it does any other handgun. Furthermore, tightening the entire hand instead of just the trigger finger—a fault that every pistol shooter has to guard against—shows up immediately with an air pistol.

Since practice with an air pistol is beneficial, the fact that it is fun is a strong argument in its favor. The good ones with rifled barrels are accurate and very cheap to shoot and, of course, there is no smoke and very little noise. If you buy one you'll find that you shoot it ten times as much as all your other guns combined. There never will be any question of what to do when some of your shooting pals drop in, and unless you're plenty hot already I'll be surprised if you don't find your scores with your powder-burning handgun moving up.

OUTDOOR KIDS—from Page 7

"We studied it in school last year. In fact, I remember that Longfellow said something about the flower in his "Hiawatha." Don't you remember when he said that Hiawatha's canoe floated on the river like a yellow water lily?"

"Well, I think I like the white water lily better," Jane decided. "It is called the queen of all our water plants and I can understand why, too. I even like the leaves better than the leaves of this yellow one, for they float on the top just like the flowers."

All the time Jane and Billy had been standing in the middle of this raft of spatterdock, a male redwinged

blackbird had been fluttering overhead, protesting their presence with his harsh "check-check-check."

"I wonder what's wrong with that redwing," Billy wondered aloud.

"Why, I suppose there is a nest nearby," Jane ventured.

"Sure, look at that female carrying food in her bill over there by those cattails. Let's go over there and see where it is."

The yellow water lilies were forgotten. The Outdoor Kids were off on another adventure.

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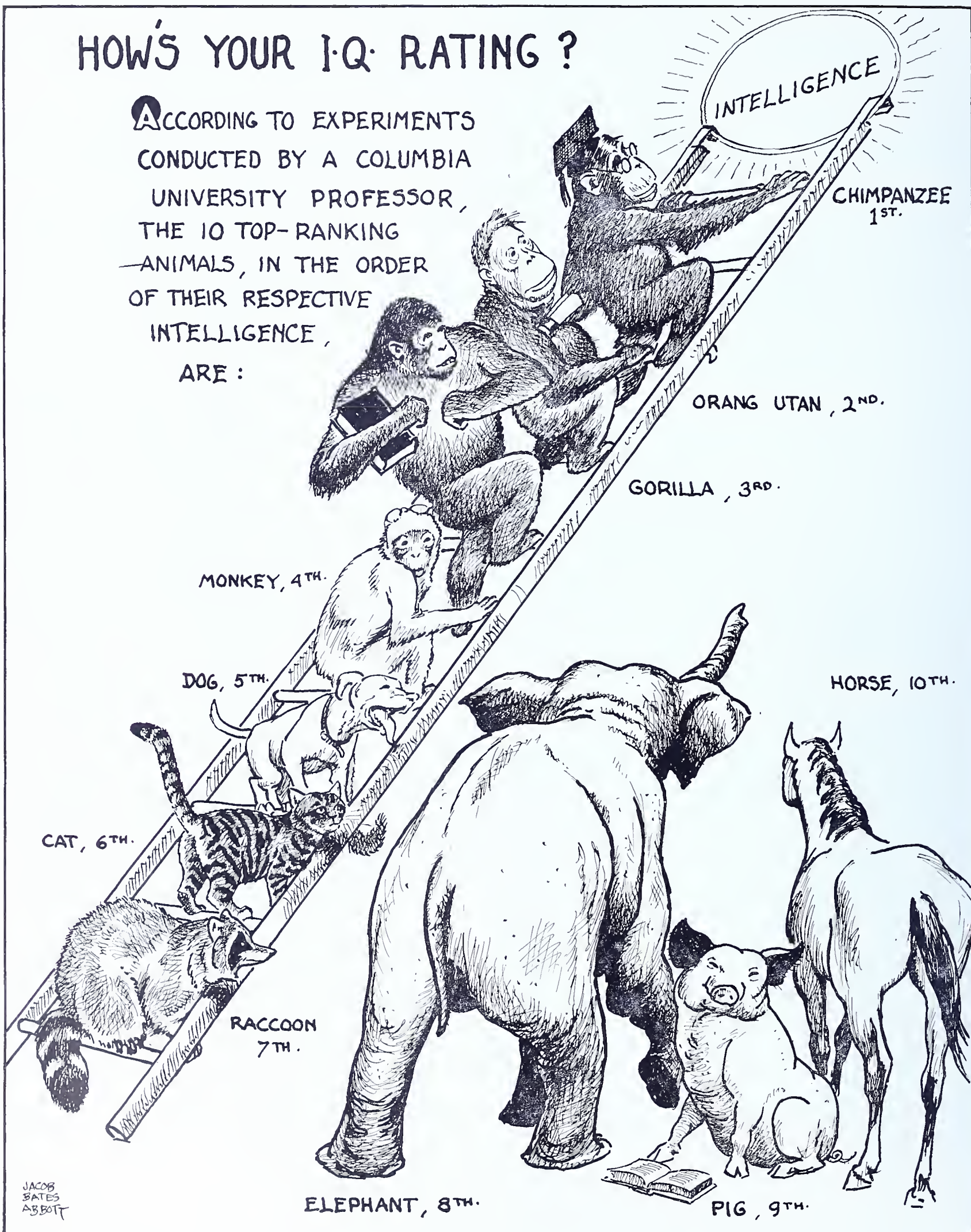
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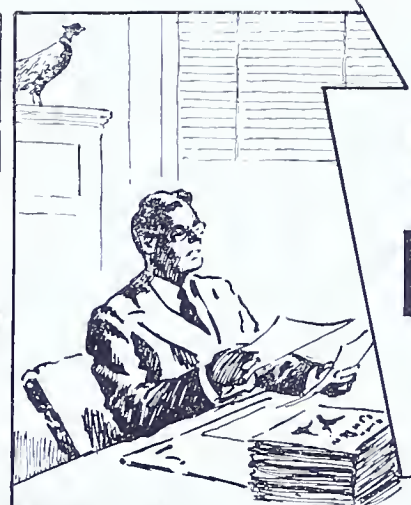


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SEPTEMBER 1949

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The GAME NEWS

WILLARD T. JOHNS, JR.
Editor



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COMMONWEALTH OF PENNSYLVANIA

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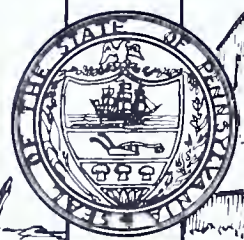
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THE PENNSYLVANIA GAME COMMISSION— STREAMLINED FOR BETTER SERVICE

COVER

"Morning Doves"

By

Jacob Bates Abbott

PENNSYLVANIA'S SACRED COWS

To all outward appearances the only difference between the male and female whitetail deer is a prominent rack of antlers. Both sexes are the same color, grow to about the same size, have similar gaits and speed, and possess the same natural intelligence. Whitetail bucks and does even offer equal challenge to the skill of a hunter and it is impossible to distinguish the meat of either when they become a tasty course of venison.

But for too many Pennsylvania hunters the simile of sexes ends before it starts. With unfounded superstition, misguided thinking, and illogical prejudice they classify doe deer in the same category as India's "sacred cows". Killing a female whitetail is reputed to be the brand of a coward, the mark of a traitor to sportsmanship.

Somehow, the fact that they are jeopardizing not only their future sport in deer hunting but, also, many kinds of small game hunting as well has not yet penetrated their minds. Now is the time for a change in this hunting philosophy! It is too late for wishful hopes and folk-lore beliefs about Pennsylvania's "sacred cows"!

For within those sleek bodies lie forces of destruction which are slowly but surely ruining the future of deer hunting here—the abilities to produce more deer. The prolific doe has long since become the dilemma of successful deer herd management; it is high time more hunters realized it. We must now belatedly face these facts:

FIRST—There is not enough food left in the natural cover of Pennsylvania to support even the present deer herd. Take a look at the size and condition of almost all the deer that will be draped over the fenders of cars on the highways next December. Take a good look! Will those trophies of the chase look like fat, heathy, well-fed animals? Or will the vast majority of them be thin, scrawny runts?

SECOND—It will be years before enough natural food can be grown to support adequately a deer herd of present day size. It would be economic suicide for any state agency or private organization to attempt to create conditions which would produce enough deer browse in a short time, either through cuttings, bulldozing, or replantings, to feed our present deer herd. Did you ever stop to realize how much food it takes to feed approximately 700,000 deer?

THIRD—Pennsylvania deer not only do not have enough to eat now but are literally ruining the food now being produced which might offer some relief in the future. In many sections of our State young trees and planted seedlings are browsed to death, thus ending any possibility for future food and cover.

FOURTH—The farmers of the Commonwealth cannot be expected to continue raising crops for consumption by marauding bands of deer. White-tails have no business on farms! Killing those that destroy or damage farm crops is little compensation for the farmer who has lost a field of grain or fruit.

FIFTH—The only feasible and sensible method of balancing our deer herd with the available food supply is by harvesting a regular crop of antlerless animals. Because of the high birth rate of deer and because a few bucks can serve many does, a reduction in the present excessive number of does will improve the future of our deer hunting. The fact is that the last three antlerless seasons were followed by buck seasons in which there was an increase in the number of bucks killed!

If we are to have better hunting of all kinds in the future, the deer must be reduced until there is adequate natural browse to feed the herd! **THE TIME IS NOW!**



OUTDOOR KID

By HAL HARRISON

"That's its right name . . . hellbender," Billy assured her. It's a salamander and the biggest salamander in Pennsylvania, too," he added.

"Gee, I'll bet it can bite," Jane declared, eyeing the hideous creature that Billy had now landed on the bank back of them.

"I don't think it could hurt you much," Billy ventured, "but I'm not going to find out. All I want to do is get that hook out of its mouth and let it go."

"You aren't going to kill it then?" Jane asked rather surprised.

"Why should I kill it?" Billy asked. "It hasn't done any harm. Most fishermen do kill them though. They call them water dogs and they believe that they eat a lot of their fish. Pop and I watched a bass fisherman hit one with a rock one morning. The fellow was mad. He swore and said that it was the water dog's fault because he didn't catch any bass."

"Pop told me later that the fellow didn't know about hellbenders and mudpuppies," Billy continued. "Mudpuppies are the same kind of salamanders except that they have red gills like plumes. The hellbenders don't have gills when they grow up. They have them only in the beginning."

"According to what pop told me, they are sort of scavengers. They live mostly on dead fish and on crawfish. I guess the mudpuppy is likely to eat the spawn of some fish but I don't think it does enough damage to worry about."

Billy had grabbed hold of the slimy salamander around the neck. He was having quite a time keeping it from slipping out of his hand as he tried to dislodge the hook with his other hand. Suddenly, the big mouth of the creature opened in a menacing way.

(Continued on Page 10)

"Holy smokes, Jane, come here, quick!"

It was Billy calling excitedly to his sister as they were fishing for chubs and catfish along Big Sandy Creek. Fishing luck had not been so good and Jane was glad to throw down her rod and rush over to Billy who was standing on a big rock at the water's edge.

"Well, what's all the fuss about?" Jane asked as she hopped onto the rock beside her brother.

"Look, Jane. You see my line out there in the water? I don't have a bite, do I? No, and you would say that I didn't have anything on the end of that line, wouldn't you? Well, sister, that's where you would be all wrong. Now just watch what I pull out of there."

With that, Billy started to lift his line. For a moment it came freely. Then suddenly, it became taut. The boy gave it a strong heave and out of the water came a big, slimy, wriggling creature with four legs, a tail and an ugly flat head.

"What in the world is that thing, a lizard?" cried Jane, stepping back a few paces and throwing her hands in the air ahead of her. It was evident that Jane was not at all anxious to touch the thing that Billy had caught on his fishline.

"Lizard? Who ever heard of lizards in water," Billy scoffed. "That thing is a hellbender."

"A what?" Jane looked at her brother rather skeptically.

Our Deer Herd and its Effect on the Management of Food and Cover for Wildlife

by Ross L. Leffler

An Address delivered by the President of the Pennsylvania Game Commission at the 38th Convention of the International Association of Game, Fish and Conservation Commissioners, Atlantic City, September 16, 1948.

THE deer problem of Pennsylvania is a very real one—chronic in the natural ranges throughout the Commonwealth and becoming increasingly acute in our agricultural sections. The problem has been evident to our Commission as well as to a small percentage of sportsmen for decades, but the rank and file of hunters can not or will not recognize its existence, let alone its extent or severity. *We are not merely preparing to meet future wildlife catastrophes. They are with us now, increasing each year in direct proportion to the size of our deer herd.*

The signs of our abnormal deer population are plainly discernible. The animals themselves, once typifying a noble sport and a noble trophy, have in many localities degenerated into small specimens bearing small racks. The question arises, has our deer hunter likewise degenerated, (if I may use that term) from the season-long camp type into the one-day meat hunter, content to sacrifice a season of comradeship, healthful recreation, and the possibility of securing or aiding in obtaining a desirable trophy, for the satisfaction of killing a semi-domesticated runt?

The agonies accompanying winter starvation periods and the brutal slaughter of weakened deer by wild dogs are only too familiar to our game protectors.

An established browse line, winter die offs, single births, abnormal dates of births, poor racks, poorer deer—yes, all the signs of an abnormal herd are to be found in Pennsylvania's deer range, or what used to be our deer range, covering about 30 counties. For today these animals are to be found in all of our sixty-seven counties, including those in which the cities of Philadelphia and Pittsburgh are located.

And what has happened to the range itself during these years in which such a herd has been using, and abusing, it? Favorite browse species have grown into stands of pole stage timber. With the resultant closed canopy, shading out has practically eliminated all natural reproduction, not destroyed by the deer. In sections of high deer populations natural reproduction of browse, in cleared areas, is completely eliminated by the voracious animals after providing immediate relief for but one winter from the resultant establishment of browse.

What has the Pennsylvania Game Commission, charged with the administration of all wildlife resources of the Commonwealth, done to alleviate such conditions on its own 860,000 acres of forested State Game Lands, and to point the way for improvement of similar conditions on the remaining fourteen million acres of our forested land?

Our first and best management practice is the employment of

the high-powered rifle. Our forested holdings have not yet reached the stage where they are attractive to the lumberman (and subsequently to a deer herd) so we must first attempt to control the size of our herd by establishing seasons *which will permit a maximum harvest of animals.*

Antlerless seasons, and their administrative headaches, are not a new experience for the Commission. Since the first "doe season" was established in 1923, in the face of terrific opposition, we have had fifteen antlerless seasons, limited and state-wide, in the twenty-five years which have followed. Nobody enjoys statistics but I would like to point out that since 1915 our hunters have killed 561,260 legal antlered bucks in thirty-one seasons as compared with the total kill of 566,093 legal antlerless deer in fifteen seasons. This might appear at first glance as though we have balanced the sex ratio of the herd, but such is not the case. During a one-day antlerless season in 1947 our hunters shot 106 deer per minute for ten hours of hunting. In all, 63,568 legal antlerless deer were taken, while but 31,475 antlered bucks were killed during an eleven day season immediately ahead. One other feature of our current deer herd and then I will pass on to another phase of our problem.

In Pennsylvania a farmer may protect himself against deer forays onto his lands in one of two ways. He may erect, at his own expense, deerproof fencing supplied him by the Commission (this fencing was unobtainable during the war years, but in the past we have supplied over 125 miles of it), or he may kill those animals injuring his fruit trees, or crops. During the past ten years over seventeen thousand animals have been shot by landowners under this provision of our Game Code. *And during those same ten years the Pennsylvania Game Commission declared seven antlerless seasons partially in order to relieve agriculturists from deer depredations.* Are we succeeding in aiding the farmer? I leave it up to you.

As stated before, there are approximately 15 million acres of forest land in Pennsylvania. Of these our licensed hunters have purchased, and entrusted to the administration of the Pennsylvania Game Commission, about 860,000 acres, or approximately 5% of the total potential deer range.

These lands were purchased in order to provide recreation in the form of supplying open hunting grounds and refuges for all forest-game species, both large and small game. The purpose of this paper is to present to you those management practices we have employed for all such forest-game species and their success or failure as caused by an excessive deer herd—but one of the species concerned.



"Has our deer hunter degenerated from the season-long camp type into the one-day meat hunter, content to sacrifice a season of comradeship for the satisfaction of killing a semi-domesticated runt?"



In reviewing our game-kill statistics we can find no correlation between deer and bear kills to show an effect of an increasing deer herd upon our native black bear population. Weather during our open bear season and the ardor (probably decreasing) with which our bear hunters pursue bruin, together with the mast crop of the preceding summer and fall, seem to determine the number of bears taken. In this sport, too, we find the camp group hunter giving way to the one-day solitary hunter. At one time our game protectors could check and account for almost all bears killed in their respective districts during the open season. Then the animals were proudly hung before organized camps for all to see. Now approximately three out of every five bears killed are examined and checked at the homes of successful hunters who have returned from the northern tier counties immediately after securing their trophy.

In order to provide better habitat conditions for the various species of small game and furbearers inhabiting its State Game Lands, the Pennsylvania Game Commission has carried on, in increasing volume, a constant program of food and cover development on these forested holdings. It is becoming increasingly evident that the success of our development practices are not dependent upon the vigor with which we pursue this program, nor upon the expenditures involved in its rapid increase, *but are dependent upon the amount of control we may be permitted to exert upon the deer populations on our lands by our*

licensed hunters. We have no better illustration of "wanting to have, yet eat, one's cake."

Let us study the facts a little more in order that we may determine just what success we are meeting with our expanding food and cover development program.

A survey of our holdings reveals that most timber thereon is in the pole stage, or in some cases contains marketable saw lumber. Most of our forested tracts represent heavy stands of even-aged timber with but a low percentage of natural open areas. In order to create a forest of uneven-aged timber, in order to increase the amount of natural openings, and in order to provide such openings with now lacking food and cover for our small game and furbearers, we have employed many techniques.

We are selling, wherever and whenever possible, such marketable timber as local lumbermen will cut. This includes saw lumber, pulpwood, chemical wood, wood for mine props and ties, special types for veneer and local uses, and firewood. Five and six years ago we were able to sell but 2,000 acres per year for such purposes. In the past four years we have expended this program until we now average 13,000 acres per year. Prior to such cuttings the closed canopy and the deer had eliminated approximately 80% of any natural forest reproduction. For the first year following this lumbering there is a limited supply of browse. Afterwards the amount of food and cover provided is directly proportional to the number of deer utilizing such areas



"The agonies accompanying winter starvation periods and the brutal slaughter of weakened deer by wild dogs are only too familiar to our game protectors."



and the appearance of such openings varies anywhere from a clearing covered by bracken, and other ground vegetation, to a brushy one with its sprouts and briars providing both the desired food and cover. However, occurrences of the former appearance far outnumber the latter optimum conditions.

Monies derived from the sale of such timber are used to provide, in part, for the carrying on of management practices that are not self-paying except by increasing the amount of game (one of a Game Commission's principal aims) through habitat improvement.

Over one thousand acres per year have been cut, mostly as clear cuttings, by the Commission in order to open up unbroken stands of non-saleable timber. Here again, in most instances, the results are the same. The openings are created, but little or no natural reproduction escapes the ever present deer herd. One year's relief—then nothing.

Recently we have employed a relatively new tool provided the game manager—the bulldozer. We have created approximately 2,000 acres of bulldozed areas within our large unbroken tracts of even-aged stands of timber consisting of species which will never produce good merchantable lumber. These are, for the most part, usually in the pole stage or beyond, and therefore they are deficient in food and low ground cover. The study of this technique has not progressed far enough to afford us complete information regarding its ultimate results in providing both food and cover for our forest small game species, in addition to providing browse for our deer. Preliminary indications lead us to believe that this method, though costly, might prevent our herd from converting a down-timbered area into an open field in but one season. If the bulldozed growth is pushed into huge windrows, some protection is thus afforded to seedling, sprouting, and suckering reproduction. We are pursuing the study of this procedure with all effort in order to determine whether or not at last we may obtain the desired results through curbing the depredations of our herd.

We are increasing our planting of other openings in food plots designed primarily to benefit the turkeys, ruffed grouse, snowshoe hares, and cottontails of our forested lands. Remember, these are small areas widely scattered over the 15 million acres. Over four thousand acres of such food plots have been planted in the last six years, two thousand acres being established in the past two years. Again we find that the species for which the practice was employed are not those which benefit. The deer merely eliminate them by grazing instead of browsing and our efforts are largely nullified.

Replanting of openings to deciduous and coniferous food and cover trees has been greatly curtailed by the fact that few seedlings were available during the war years. We have been able to plant on State Game Lands but 1,600,000 such seedlings in the past six years. A recent state-wide survey of these plantings revealed a survival of but approximately 28%. Most of this survival was on lands which do not, as yet, contain an abnormally high deer population. On many of our holdings in the true deer range survival of these plantings was nil. The Pennsylvania Department of Forests and Waters has been forced to suspend its reforestation planting program on much of its lands for the same reasons.

One entire phase of our wildlife program, that of food and cover development on our forested lands, is retarded and being defeated by but one of our game species—the white-tailed deer. We are beyond the stage where sound game management calls for only harvesting a surplus of excess deer. *We are faced with not harvesting but controlling them with the same determination with which we attempt to control any undesirable species. For the good of our other game species, for the good of our forests, and for the good of the deer themselves this must be accomplished.*

May I at this time summarize past actions of our Pennsylvania Game Commission in order to determine in what way we may be held solely responsible for the creation of this wildlife problem.

Our Commission was created in 1895 and appointed in 1896. Pennsylvania was then indeed a shot-out State. One of the Commission's first major programs was the reestablishment, or reintroduction, of a deer herd in our forests.

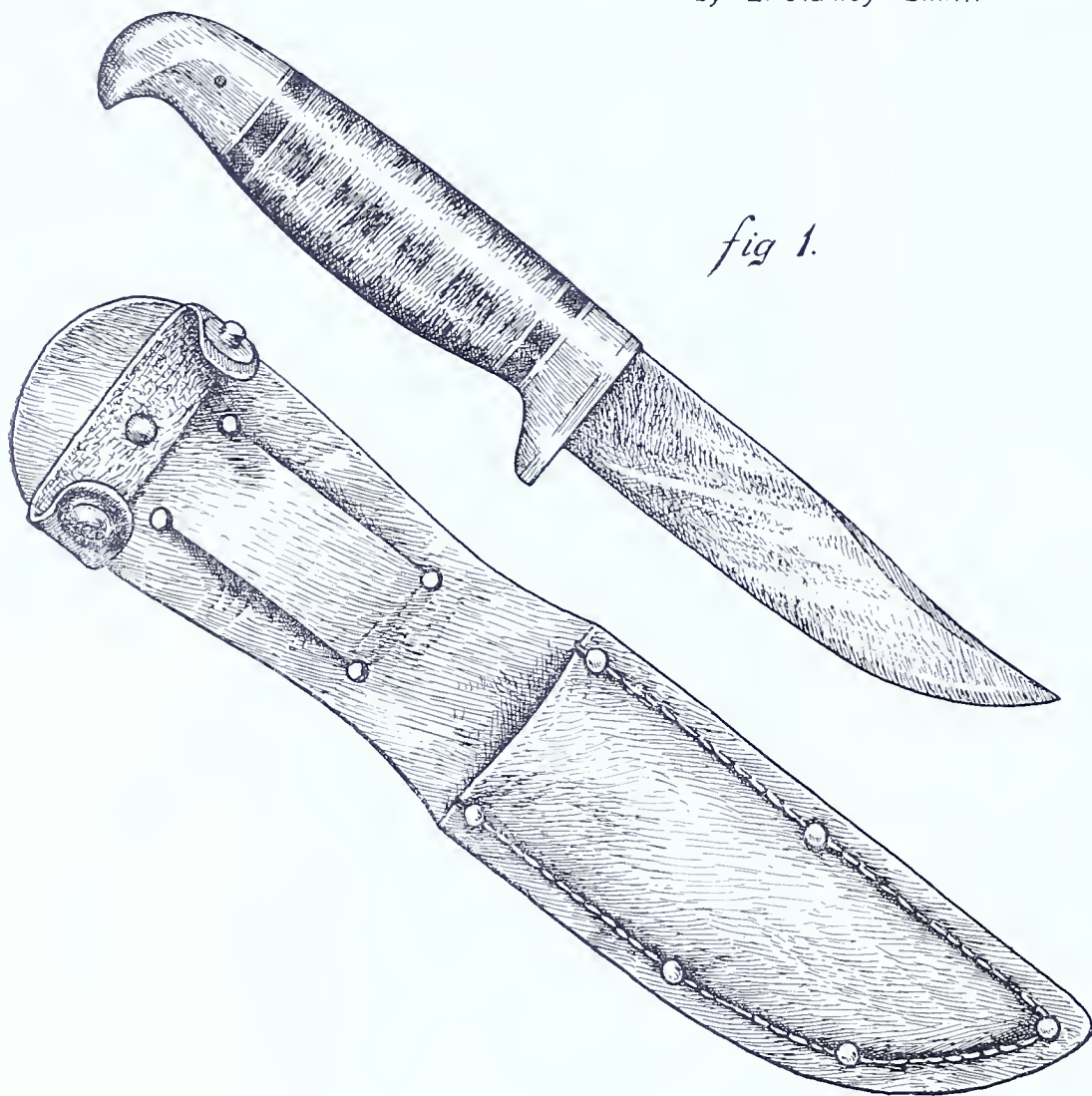
In 1897 market hunting, hunting with dogs and killing deer at salt licks were prohibited. In 1905 our first big-game refuge was established. In 1906 the first deer were imported from



"We would have been far better off had we permitted the killing of deer, not only bucks, even during the early days . . ."

A Hunting Knife You Can Make

by E. Stanley Smith



THAT knife in Figure one looks like the real "storeboughten" article, doesn't it? Shiny and nice, with an edge that stands the gaff—you'd never guess it was made by hand. It was, though, and what's more the job can be duplicated by anyone who's ability with tools isn't limited to hanging screen doors and splitting kindling. Making your own hunting knife not only furnishes you with a fascinating hobby, but it also gives you the additional advantage of owning a knife fashioned from the finest steel and built to your own specifications. Never too long or too short, too hard or too soft, the hand-made knife is always perfect for the guy who made it—or, at least he'll never admit it isn't.

Knives aren't costly to make, either. The leather, brass, aluminum, steel, etc. used in their manufacture can be obtained from scraps and odds and ends. The only items likely to nick your roll will be the snaps, rivets and leather used in the sheath.

Only a few tools are required. A grinder of some sort is a prime requisite, and this should be of the power-driven type—unless you're optimistic enough to think your wife will crank one of those muscle-operated

affairs for you while you do the grinding. Several assorted files, a hand drill, hacksaw, knife, emery and sand paper and a few other items usually found in the home workshop complete the list.

The first step is to decide exactly what kind of knife you want. Determine the length and shape of the blade and the length of the handle or hilt, and incorporate these features in a cardboard pattern like the one in fig. 2 showing the outline of the blade and tang. The latter tapers in width from 7/16th inch to 7/32 inch and is 1/2 inch shorter than the hilt. The knife in the illustration has a 3 7/8 inch hilt; the tang is 3 3/8 inches long.

In designing a knife my advice to the amateur is to keep it small. Veteran woodsmen don't judge a man's hunting prowess by the number of yards of cold steel hanging from his belt, and the knife described is large enough to clean and skin any game found in Pennsylvania outside the Philadelphia Zoo.

No better carbon steel can be found than that in a good quality file, and as broken or worn-out files are not difficult to obtain, one of these will be used for the blade of

our hunting knife. With the aid of the pattern, choose one as near to the desired size and shape as possible. A knife file is ideal for this purpose, as it requires a minimum of grinding, but an ordinary flat file will do in a pinch.

Grind the file to the shape indicated by the pattern. However, don't make the mistake of cutting away the steel too rapidly. The tyro who leaped from the grinder with an astonished shriek, slammed down his work and crammed his fingers into his mouth learned the hard way. Steel gets hot when you grind it! Always keep a bucket of water handy in which to cool your work at regular intervals—not only in self defense, but also to keep excessive heat from ruining your knife by drawing its temper. Watch the steel as you work. As its temperature rises its color changes—first becoming yellow, then brown, then changing to purple, then blue, then gray and finally red. A knife blade may turn yellow or brown without ill effect, but, by George, it better stop there. A higher temperature will ruin its temper. The tang, though, may turn to purple without harming the knife.

Now the sides of the file are beveled to form a sharp edge as shown in fig. 3. Don't round the sides as in fig. 4; this makes sharpening difficult and cutting a test of strength.

This is really a job! After the first hour of grinding you will understand why I advocate the use of a knife file whenever possible. This grinding business is painfully slow, and about as interesting as fishing in a bird bath, but when it's finished the rest seems easy by comparison.

Assuming that the blade has now been neatly ground to shape and you have fully recovered from the grinding ordeal, you must next attempt to remove the marks of the grinding wheel from the blade with carborundum or emery paper. Tack the paper to a bench near the edge and, holding the tang in one hand and applying pressure on the blade with the other hand, rub the knife vigorously over the abrasive. When all scratches have been removed, (or when you've said, "Cripes, this steel's hard," for the fourteenth time), change to a finer abrasive, then to a still finer one, until the blade shines like the seat of your wedding trousers. Polish the tang a bit, too, so the color can be distinguished during heat treatment.

A file is much too hard and brittle to be used as a knife, so the temper must be drawn by heating it. If properly done this will result in a good, tough knife that will take and hold a keen edge.

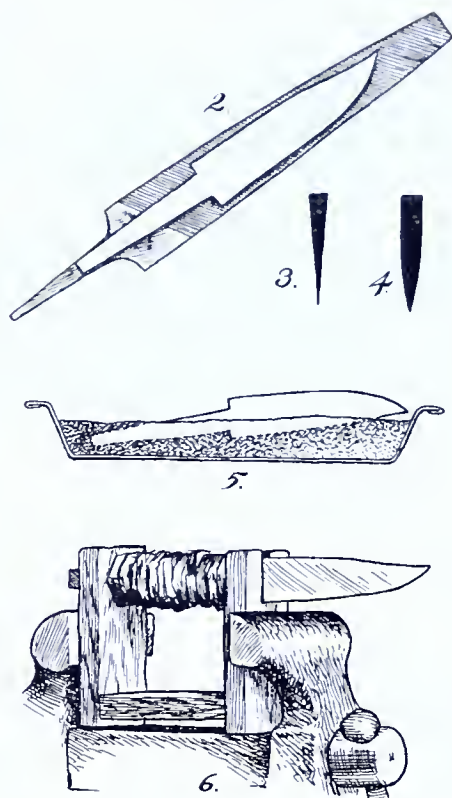
To draw the temper first spread a 1 inch layer of dry sand in an old pie pan. Then set the pan on a stove and place the knife in the sand on its back, cutting edge uppermost. Press the tang well into the sand

and allow the tip of the blade to protrude slightly, (fig. 5) causing the heat to become greater at the tang than at the other end. Turn on the heat *gradually* so that you will have ample time to experiment and adjust the blade to get the best results. Keep an eye on the color of the steel. The ideal coloration is gray at the end of the tang, blending into blue at the tang's center. Where the tang joins the blade the color should be purple and the entire blade must be brown, with a trace of purple at the tip. When the proper color is attained the blade should be removed and allowed to cool gradually. The blade will continue drawing slightly after being withdrawn from the fire, acquiring a few purple streaks. These are indications that the correct temper has been reached. Should the blade threaten to draw excessively this action must be halted by quenching in water, but for maximum toughness don't resort to this treatment unless absolutely necessary.

Occasionally, in spite of your vigilance the blade will draw too much, ruining its temper. That's not good, but you *may* be able to salvage your knife by hardening it and drawing the temper again. Heat it to a cherry red and quench it in water, on the surface of which is floated a film of oil. The thin blade will lose heat quickly, so don't lose any time transferring it from the heat to the water. And don't be surprised if it warps to the shape of a full-drawn long bow after quenching—this happens to the best of 'em. That'll "larn yuh" to do it right the first time.

Now the end of the tang must be softened, or annealed, so that it can later be drilled. This is accomplished by wrapping a wet rag around the center of the tang to protect the rest of the knife, heating the tip of the tang to a bright red color and allowing it to cool slowly. Now, polish the entire knife with fine abrasive paper or cloth.

Making the hilt will be more fun, and you can let your imagination run riot in the choice of materials. A good-looking hilt can be made of 'most anything—leather, hard rubber, brass, copper, aluminum, ivory,



deer antler, plastics, fiber and hard-wood are but a few possibilities. The one illustrated is composed of aluminum, brass, hard rubber, deer antler and leather, but other combinations are equally pleasing.

The facing for the guard is cut from a scrap of 1/8 inch aluminum, (I got mine from the innards of a defunct radio). By drilling a row of holes in its center and cutting out the remaining metal with a small cold chisel a rough slot will result, which must be perfectly fitted to the tang by the use of a needle file. Work carefully here, as a snug fit is necessary to prevent this part twisting out of alignment.

Now from a piece of deer antler cut a piece to form the guard. If possible cut out this piece near the tip of a point where the pores are small. Shape it roughly, drill a

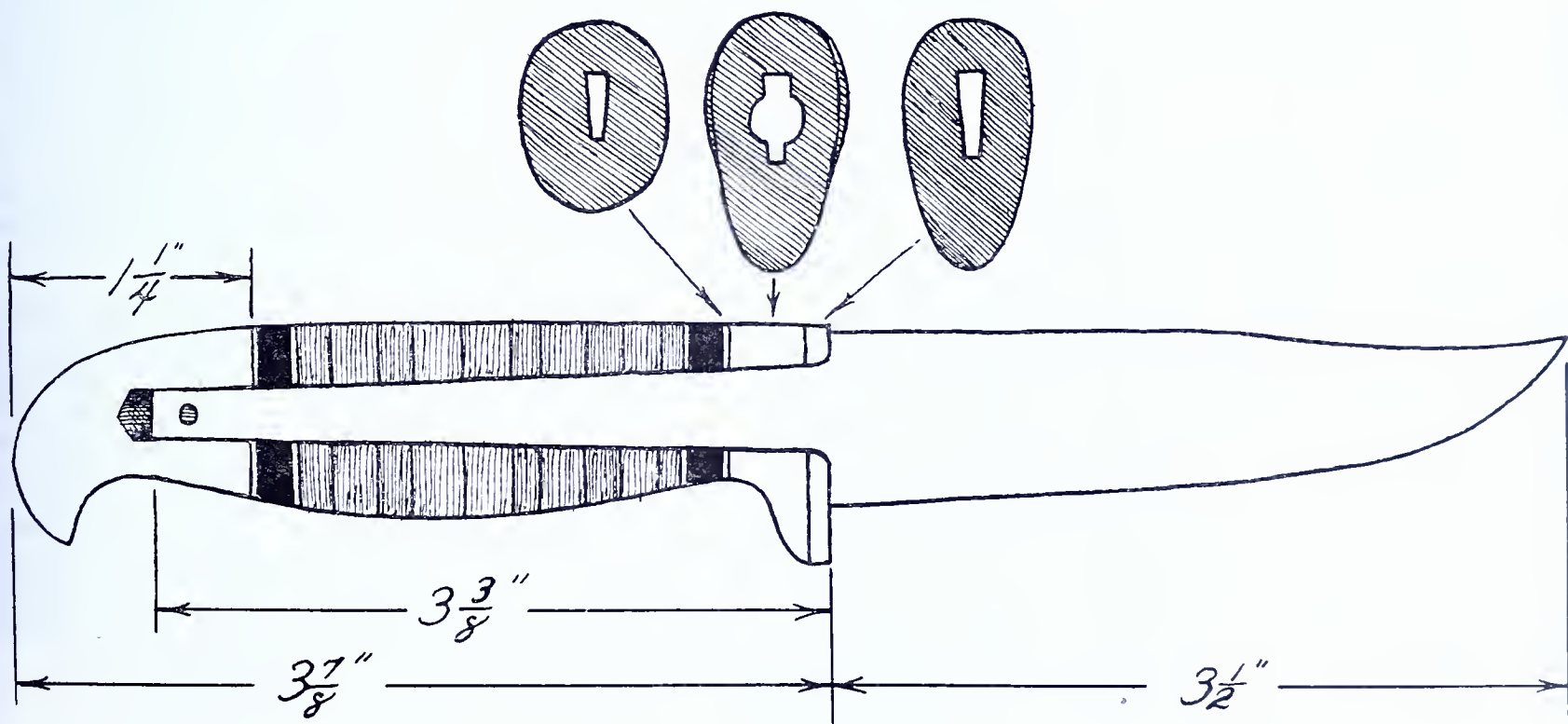
1/4 inch hole completely through it, and with a needle file cut a groove in both sides of the hole to fit the tang snugly.

Next, fashion a punch from a piece of steel with a cutting end the same size and shape as the end of the tang. This will be used to punch holes in the discs of leather and thin metal that form the hilt. Snip out a disc of thin aluminum, (source—an old kettle), and lay it on a lead block or on the end-grain of a piece of hardwood. Place the punch on its center and rap it sharply with a hammer, knocking out a rectangular slug. By moving the punch to the end of the slot and striking it again the cut should be sufficiently lengthened to accommodate the tang. Now, from a broken shotgun buttplate or some other source make a hard rubber disc by the same method used in fashioning the guard, and follow this with a thin brass disc. The center portion of the hilt is built up of leather discs. Don't use leather belting for this purpose because of the greasy dressing with which it is impregnated; chrome tanned leather is also unsuitable. Good bark tanned sole leather is the best material for knife handles and you can probably mooch a generous supply of scraps from your local shoe repair shop. These discs are punched the same as the thin metal ones. Top the leather with a disc of brass, then one of hard rubber and finally one of aluminum. All burrs should be removed from the various discs so that each lies perfectly flat against its neighbor.

By using a contraption like the one shown in fig. 6 you can compress the hilt and see exactly how many discs will be required. The tang must be filled to within 1/2 inch of the end, leaving room for the pommel or end of the hilt.

Now remove all discs except the first one and replace them in the proper sequence with a *heavy* coat of DuPont cement on the face of each. This DuPont goo dries in a hurry, so you'll have to move fast and lay it on thick. It may be necessary to compress the hilt several times before all the

(Continued on Page 28)





THE ABC'S OF GUN DOG PSYCHOLOGY

by James R. Hayes



WE left the dirt-road about four o'clock, unleashed Tessie, and followed her into the field. There were six weeks to hunting season, and the three of us—Paul, his pointer, and I—were warming-up for the big day.

The autumnal afternoon was slipping steadily on towards evening. All nature was at the season of ripening—in open fields, burdocks and briars were brown in the dry yellow grass; the fringing woods were brilliant with fall colors.

Tessie ranged eagerly through the brush, nose wanting bird-scent. Cross-field she worked, to a clump of young sumacs. A half-fallen railfence showed above the tall grasses. Tangles of briar and goldenrod grew up through the rails. It looked birdish. And Tessie, hot on a trail, slid into a beautiful point beside the fence.

Paul and I stood there, watching, then moved in to flush. There was a flurry of wings as a ringneck, iridescent in the sunlight, hammered out and sailed to a far-away cornfield. We watched him glide out of sight.

"Instinct," said Paul, patting Tessie's side, "instinct is a wonderful thing. Just think of all the breeding, all the generations of gun-dogs that went into that point."

"Aren't you forgetting something?" I asked. "Seems to me the trainer deserves a little credit."

"No doubt about that," Paul said. He picked some burrs from Tessie's ear. "But it's mainly instinct. In the blood, y'know."

I didn't know, but I decided to find out. My findings were rather surprising. For it was, for me, really surprising to discover how few dog owners completely understand the basic motives underlying hunting and pointing traits in their dogs, understand the psychology of gun-dogs. I bring in this term "psychology" because it is, in essence, the study of behavior and motives. And since we cannot possibly know what our dogs think, we can judge them only through their behavior.

Like Paul, many dog owners have the notion that hunting is instinctive for sporting dogs. By "instinctive" they mean that their hounds and pointers are compelled to hunt, that it is a natural inborn urge. Yet recent studies indicate that it is no more instinctive for dogs to hunt than it is for them to jump through hoops. If we raise our setters with game birds, they will be-

come conditioned to them. Such conditioning could not have taken place if hunting was instinctive.

Similarly, a beagle pup, raised in a controlled environment and not given the opportunity to develop hunting traits, will not come by them naturally. Chances are good that he will learn to run rabbits if permitted to observe other hounds. But unless the opportunity to learn and imitate is present, he will not hunt through instinct, heredity, or internal compulsions.

There are many popular misconceptions concerning instincts. When a dog circles several times before lying down, we say it is an instinct. In the dawn of dog history, wild canines circled to trample down grass. Therefore, through the magic process of heredity, our dogs continue to circle before lying down. Yet pups will never circle before lying down unless they see other dogs circling. And that makes it learned behavior, not an instinct.

We also say that migratory traits in birds are instinctive. But scientific studies have conclusively demonstrated that migratory traits in birds are responses to certain external conditions. Instinct is an internal compulsion.

Concerning pointers and pointing, all evidence tends to show that pointing is strictly a learned skill. All dogs point. That is, all dogs have a tendency to become rigid and look at objects. This inclination is possibly a holdover from puppyhood when, due to poor vision, it was necessary for the dog to stare intently at objects to determine what they were. The same is true of noises. When the pup heard a strange sound, he froze, ears erect, body rigid, assuming all the characteristic of a point.

Pointing in bird dogs is merely a strengthening and a directing of freezing tendencies through imitation and reward training. When a pointer pup sees a trained dog pointing game, sees that the action is rewarded, he becomes conditioned to act in the same manner. If his trainer pats his head, the dog quickly comes to know that pointing is the correct response for certain smells and conditions.

Later the dog is taught to differentiate between various scents and conditions. If he points a rabbit or a field mouse, the reward is withheld. Gradually the stimulating conditions of pointing are narrowed until the dog learns which scents to point and

which to ignore. As the dog matures and lessons are continued, performance improves. Higher order conditioning follows—the scent of birds is associated with the sight of birds; cur dogs come to know, through trial and error, that pheasants will run and quail will set; they learn to a limited degree what the gun signifies, how to handle cripples, and to enjoy this exciting sport.

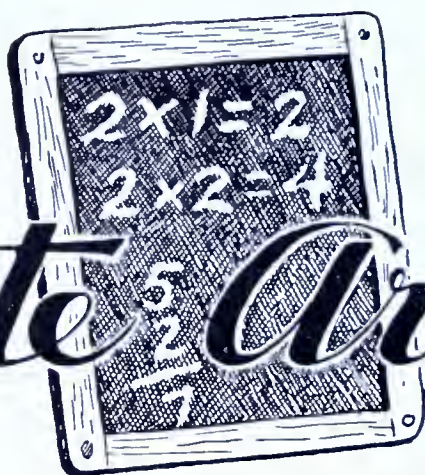
That pointing is so learned makes it clearly an acquired trait, not an instinct. Moreover, the fact that a bitch is a good pointer will not necessarily make her pups good pointers. Unquestionably the pups will have a better chance of making the grade—better, say, than the pups of a poorly hunting bitch. But the former pups will have the advantage of watching their well-trained mother perform, and will inherit, to some extent, the intelligence and learning capacity which enabled the mother to learn pointing so well. Her pointing skill will not be passed on through birth, however. The pups will not point game unless given the opportunity to learn and imitate.

Another fallacy held by many hunters concerns the "instinct" of dogs to retrieve game. Most trainers, I believe, will agree that retrieving is anything but instinctive. It must be carefully developed. The dog learns that he will be rewarded if he picks up thrown objects and returns them to his trainer. Finally this basic skill is narrowed into the more precise function—that of picking up and retrieving game.

Through every phase of gun-dog training, these concepts are the same. First the general principles are strengthened and directed, then narrowed into the desired response.

The best approach to the training of hunting dogs involves asking yourself: "Why does my dog do the things he does?" For by understanding the basic motives underlying behavior, the trainer can more readily and more effectively channel that behavior into precise, highly skilled functions. Performance of hunting dogs can be first-rate only if training is first-rate. Intelligence, learning capacity, build, color, steadiness—these can be improved and maintained through careful breeding. Mother Nature's contributions are many; but she cannot make a hunter of your dog.

Instinct notwithstanding—your dog can only be as good as you make him.



Bobwhite Arithmetic

by Robert D. McDowell

Final Report Pittman-Robertson Project 35-R

The Problem

In 1946, as part of their field work during a bobwhite quail study (Pittman-Robertson Project 16-R), Roger M. Latham and C. R. Studholme released 1,000 mature and 1,000 young game-farm birds in Fulton County, Pennsylvania.

A spring census of the quail in Fulton County the next year revealed that these 2,000 stocked birds had contributed nothing, or very little, to the previously existing bobwhite population. *And this in a section of our traditional quail range where quail shooting is frowned upon and is at a minimum!*

Following the advice of these two workers, the Pennsylvania Game Commission is now striving to develop a strain of bobwhite quail at its Eastern Game Farm that is at least physically capable of surviving Pennsylvania winters. Quality, not quantity, is being stressed. Consequently production has been reduced.

Because, as stated above, the Fulton County releases provided no recreational value to the gunners the 2,000 birds were written off as a total loss. In order to determine just how much sport fall-released quail of high quality might provide, the Pennsylvania Game Commission directed that a large stocking be made in coverts that would be hunted. Also, they sought to determine the ability of these improved strains to survive through a winter. Therefore, Pittman-Robertson Project 35-R was inaugurated.

The Study

Accordingly, 5,000 pen-reared birds raised at the Eastern Game Farm were designated for experimental releases. These birds represented the young of seven strains of breeders, carefully selected for their physical fitness and disease-resistant qualities.

Seven Cooperative Farm-Game Projects comprising 23,000 acres in Crawford and Mercer Counties were selected for this experimental stocking (1) because they are open to public hunting and (2) because the climate of northwestern Pennsylvania is

normally severe enough to test the stamina of released game-farm birds.

Prior to any releases, landowners residing on these projects were contacted to determine the native bobwhite quail population as of August 24, 1948. Thirty-eight coveys of approximately 456 individual birds were located.

From September 8 to September 10, 4,958 12-14 week-old banded birds were released in groups of twenty, thus increasing the quail population on these 23,000 acres to 5,414 birds, or one bird to each 4.2 acres.

The birds were liberated in a quiet fashion, most of them in fields of standing corn with an understory of ragweed, fox-tail and pigweed—certainly a habitat providing ideal food and cover. Additional food was present in the form of multitudes of grasshoppers and other insects. Perfect weather conditions prevailed during, and after, all releases.

The Findings

Ten deputy game protectors patrolled the 23,000 acre study area during the 12-day open quail season (November 1-13) to obtain the number of bobwhites, native and released, killed by gunners utilizing the area. In addition to these ten men, eight salaried field officers were on the projects from time to time during the season. Their records, plus voluntary return of leg bands by successful gunners, indicate that sportsmen killed 100 native (unbanded) birds as contrasted to 252 stocked (banded) birds.



This means that 22% of the resident population was shot, whereas but 5% of the introduced farm stock was taken. Where were the other pen-reared birds?

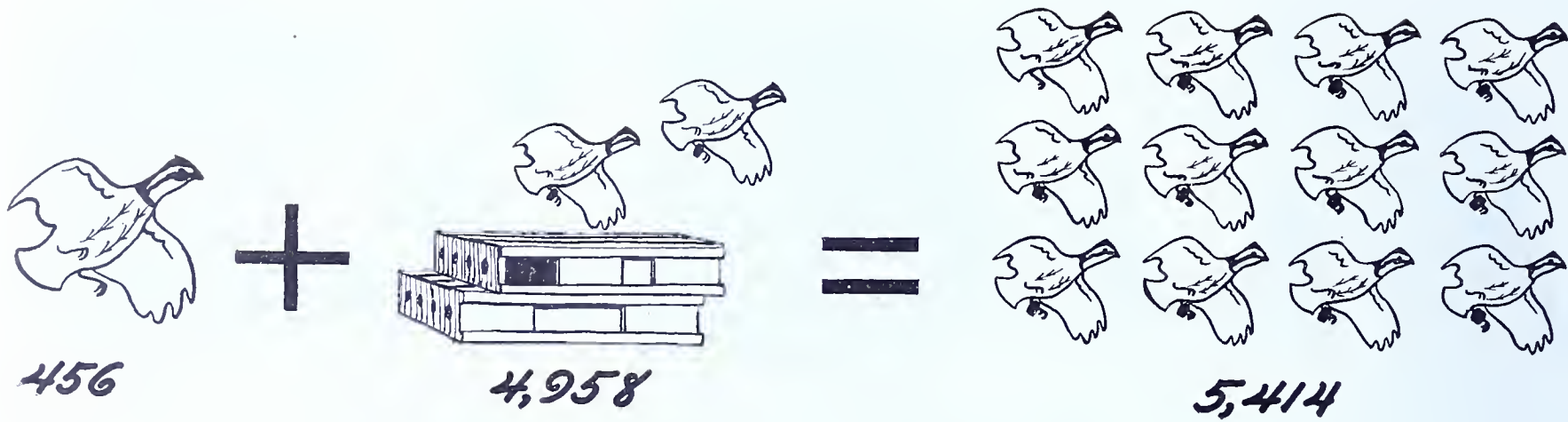
Perhaps the stocked birds moved from the project. Perhaps the introduced coveys moved in toward farm buildings and were thus protected by the Safety Zone law of the Game Code which prohibits shooting within 150 yards of occupied dwellings. Perhaps keen-eyed sportsmen could detect the small aluminum leg bands of the game-farm birds and, for some reason or another, refrained from killing them on the covey rise. Perhaps other successful sportsmen failed to report killing banded quail. Be all this as it may, the fact still remains that, if we use the fall population of native quail as a criterion, 252 (5%) rather than 1,091 (22%) introduced pen-reared bobwhites provided recreation for the gunners.

From the time of these fall releases (September 8-10, 1948) until April 11, 1949, five quail definitely fell to predators and two birds were killed by flying into stationary objects.

Last winter was open and mild. At no time was the ground covered by snow for more than five days on these projects. Bobwhites have not had such ideal wintering-over weather in Pennsylvania for many years. The spring census of quail taken in April, 1948, using the landowner-contact method, indicated that 187 coveys of approximately 2,571 individuals remained of the 5,055 birds (native and stocked) unclaimed by known hunting, predation, and accidents. When, then did the 50% loss occur?

It is our opinion that the majority of this loss took place between September 10, 1948 and November 1, 1948 because:

- (a) Gunners killed but 5% of the released birds in the twelve-day open season during which they took 22% of the native stock. It is extremely doubtful that the presence of small aluminum leg bands would account for a willful selection of take by hunters.



(b) The loss of leg bands, which differentiated the stocked from native quail, is negligible. Bobwhites have been held, on wire, for long periods of time without freeing these same bands from their legs. Even if all the quail killed on these seven Cooperative Farm-Game Projects were young pen-reared birds they would represent only a 6.5% take of the total population following the releases.

(c) The mild weather of the past winter would not account for the loss of 2,484 native and pen-reared quail. District Game Protectors and Farm-Game Managers checked the projects throughout the winter. In addition to

their many other duties they erected feeding shelters in which they placed whole yellow corn for bobwhites, pheasants and rabbits. If such losses took place during that time there is no doubt that these men would have noticed it.

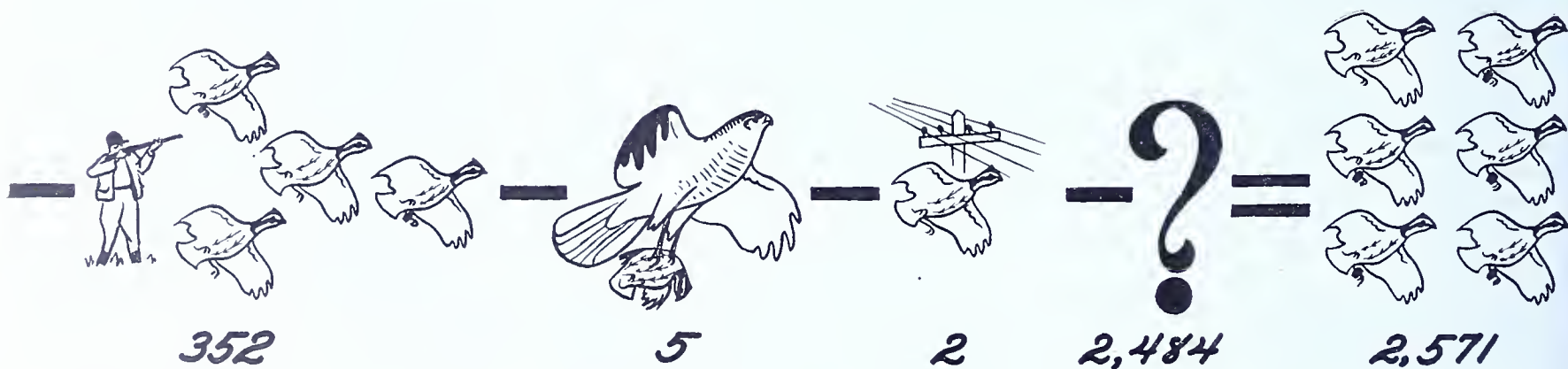
The Conclusions

Despite the possibility that many released quail quickly moved from the areas, despite the possibility that many of them perished shortly after release, and despite the possibility that many Pennsylvania sportsmen failed to cooperate with the Commission by returning leg bands, it may be reported that approximately 45% of these improved bob-

whites survived from September to April on a 23,000 acre study area in northwestern Pennsylvania. *Forty-five percent when previous efforts in south central Pennsylvania failed utterly!*

We believe the mild winter is mainly to be credited for this encouraging success, but we also would like to feel that our improved methods of breeding and rearing quail at our Eastern Game Farm were also, to some small extent, responsible.

Such experimental releases will be continued and the results analyzed until the Commission is satisfied that it has succeeded in producing a strain of bobwhite quail that is fit for the stocking of our present depleted coverts.



OUTDOOR KIDS—from Page 2

"Look, Billy, it doesn't have any teeth," Jane cried in surprise.

"By golly, it doesn't," Billy agreed. "And some fishermen are scared to death of them. I guess they never looked inside their mouth like this or they wouldn't be afraid of teeth that aren't even there."

"Here, let me help you," said Jane, much braver now that she realized that the hellbender was only ugly to look at. "You hold him still with both hands and I'll get the hook out."

Together the children freed the salamander. It was

about 18 inches long, much larger than the average mud-puppy which rarely reaches over 12 inches. Billy dropped the hellbender into the shallow water and together they watched it wriggle out into the current.

"You know what that thing looks like?" asked Jane. "It looks like an old wrinkled cucumber that has turned brown."

"Well you stand there figuring out what it looks like Jane. As for me, I've got some fishing to do. And right now," Billy snorted as he grabbed his rod and headed for the bait can.

Wildlife's Share in Clean Water

by Bill Wolf

FROM the outdoorsman's viewpoint, water pollution would seem to be the fisherman's headache and not the hunter's—at first glance. This is strictly at first glance, though. Naturally, all persons interested in the outdoors are linked together in a common cause; but even the hunter who might like to see clean streams because they are pleasing to the eye cannot connect immediately their relation to the land life which interests him. However, there is a very direct connection which makes Pennsylvania's present Clean Streams program of considerable interests to the man with a gun who may never touch a fishing rod.

Let's take concrete examples. A flight of ducks, coming down from the north country at the first approach of winter, may be tempted to stop briefly on the Delaware River or the sloughs bordering it below Philadelphia. This water has been labelled "one of the most grossly polluted areas in the United States," and anyone who has ever seen and smelled it would agree that that probably is an understatement. It's pretty bad. Even so, however, it doesn't harmfully affect ducks except under certain circumstances.

Sometimes there is an oil spill from a ship using the river as a water highway. When this happens, the oil spreads out on the water, often creating a nice smooth slick which looks very inviting to travel-weary ducks. If they alight on it, or come in contact with it in any other manner, several unpleasant things happen. Their feathers become saturated with oil—and then they cannot fly, they cannot swim and they cannot dive. An oil-soaked duck is a helpless creature, a ready victim for any predator or

doomed to die of starvation unless enough oil is washed from its feathers to enable it to escape its death trap.

Worse even than oil spills from ships as a source of oil pollution on the Delaware, H. E. Moses, chief engineer of the State Department of Health, told me in Harrisburg, is the waste oil that escapes from old tankers that are wrecked by ship-building firms along the river. This is a constant and difficult-to-avoid source of pollution. The many big refineries along the Delaware have been consistently helpful and cannot be considered the origin of much oil pollution.

Always present is the danger of botulism. Water pollution does not cause botulism in ducks, but it can encourage the development of the disease since the organism that causes duck fatalities thrives in decomposing organic matter. Calling it "decomposing organic matter" is a polite way of referring to human sewage and other wastes subject to the process of rotting. This usually settles to the bottom of the quiet waters and here the diving ducks feed—and become victims of the disease if it is present at all. Fortunately, botulism is not especially prevalent along the Delaware; but it is an ever-present menace.

The same conditions might apply elsewhere in the State where migratory waterfowl use our waters. Of course, Pennsylvania is not noted as a duck-hunting State; but if we contribute in any manner to the decline of ducks, we cannot be considered good conservationists.

Pennsylvania's water pollution can be divided roughly into two kinds—municipal and industrial—if industrial is broadened to

include everything from dairying to mining to actual manufacturing. Municipal pollution, of course, consists of the wastes from the cities and smaller towns that are dumped into our streams either untreated or after more of less satisfactory treatment. This refuse from kitchen, bathroom and laundry room does not greatly affect wildlife except where it is so extreme that it consumes all the oxygen in the water. When that happens, everything in the stream dies because aquatic life is as dependent upon oxygen as we land dwellers are. However, this occurs only in periods of extremely low water in slow-moving streams when the creeks and rivers can't flush themselves. It happens sometimes in the Ohio below Pittsburgh and frequently in the Delaware around Philadelphia where tidal action holds the toxic wastes in a limited area for a long time. Actually, municipal wastes can be beneficial since they act on the water like any other fertilizer when present in concentrations that are not too heavy.

Industrial wastes are another matter. Many of them are toxic, acting as a direct poison on anything that lives in a stream. No other State has as much industry as Pennsylvania. No other State has as much industrial pollution. It ranks first on both counts, and the amount of industry is a matter for pride, while the amount of industrial pollution is a record of which we cannot be proud.

The steel mills pour pickling and plating liquors into the streams, and these acid wastes are deadly. The metal mills also discharge "cooling waters" into the streams, and these cooling waters are boiling hot, raising the temperatures of the creeks to a



"The raccoon courses up and down streams each night in search of food."



Lynn Chase Photo
"Water pollution can encourage the development of botulism in ducks."

degree intolerable to wildlife. The bituminous mines in the southwestern corner of the State yield "sulphur water" and so, too, to a lesser degree do the anthracite mines in the eastern part of Pennsylvania. Most of this sulphur water comes from abandoned workings where the action of air and water on minerals in the walls of the mines create an acid discharge that emerges to flow into the nearest stream. It's a foul and deadly discharge, yellow in color and looking for all the world like "rusty water" if there could be such a thing.

We have pulp mills that discharge toxic "black liquors" and other poisons in both the sulphate and sulphite paper-making processes. Woolen mills give off wool scouring wastes, other textile plants produce poisonous matters. The list could go on for many words—but can best be cut short by saying that Pennsylvania's very industrial strength also is its weakness where the conservation and care of its vital water supplies is concerned. The fact that the State is making giant-sized strides forward in the correction of this unfortunate situation will be mentioned later. Its effect upon wildlife is the immediate concern here.

But surely, you might say, such pollution is of considerably more interest to the angler than to the hunter. It undoubtedly kills fish and fish food; but how can it concern land life?

Walk along a stream sometime after a snow or when there has been a rain and mud that will show tracks. You will find the answer to the above question. I do not know the exact percentage of wildlife that dwells along stream bottoms and is more or less dependent upon water; but it must be large. Water is life to animals as well as to human beings. About the only animals independent of water in quantity are most of the mice and rats, squirrels and rodents in general. Others, such as deer, live in regions where pollution is not a problem. The rest, though, are entirely dependent upon clean streams for existence, or else are easily discouraged from inhabiting regions with dirty water.

Their tracks and signs of their workings are plainly visible. The raccoon courses up and down streams each night in search of food. The mink and the otter are never found wandering far from the creeks and rivers which supply their breakfasts, lunches and dinners. The thought of muskrats living anywhere except in and around water is absurd. Beavers, which are actually spreading into industrial regions (one was caught near Philadelphia in February) must have water to live. Stream bottoms, with their dense growths, also provide cover for many animals which are not dependent upon the creeks for anything else except an occasional drink.

And what does the raccoon hunt when he walks out on a sand bar or plods along the bank? He is hunting the things that also live in or near water. He is omnivorous, but when he leaves his hind-foot prints so much like those of a baby along a stream he is seeking mussels (or fresh-water clams), crawfish, small turtles or frogs. You can see where he has dined on some flat rock or log, by the empty mussel shells and bits of crawfish shells.

And what happens when the water is badly polluted? Well, the mussels are among the first forms of aquatic life to turn up their non-existent toes and die. These fresh-water clams require clean water because they live by sifting minute organisms from the water much as a filter would. This means they take into their bodies and expel from it many gallons of water a day, and when it is poisoned they are poisoned and die. Crawfish can't stand much pollution either, and turtles and frogs are singularly absent from poisoned waters. Walk along a "sulphur stream" and you will see no mussels, no crawfish, no turtles and no frogs.

Even more dependent upon water are the minks and otters. Otters are well on their way out as a common Pennsylvania animal—not because of pollution, but due to other causes. Mink, however, are holding their own very well and they are not strictly a creature inhabiting wild country by any means. I know where there are mink with-

in eleven miles of downtown Philadelphia. They dwell along a clear stream there, down to the point where industrial pollution begins on it. Below that point, I have found no traces of mink.

Although they are as equally at home in the thickets and woods as they are along streams, mink can be entirely happy with a good stream to supply them with enough muskrats, young ducks, fish of all kinds, snakes, frogs, salamanders, water insects, crawfish and mussels.

As we have seen, most of these food species are among the first to go when a stream is polluted. Muskrats weren't mentioned, but they, too, can be driven away or even killed by polluted water. In an extreme case, outside Pennsylvania's waters but illustrative of what water pollution can do even to muskrats, there is the Maumee River incident in northwestern Ohio. During the war, pollutants from munitions plants near Sandusky Bay cleaned out all the ducks, fish and muskrats in the waters and marshes of the region.

Muskrats simply must have reasonably clean water because they live on the roots and stems of succulent water plants, plus mussels and, rarely, fish and other water life. If the water is poisoned by industrial wastes, the muskrats suffer in two ways—they cannot tolerate poisoned water and their food supply is killed off.

Then there are the casual residents of streams, birds and animals which do not mean much to us as hunters; but are part of the wildlife that we enjoy seeing when abroad with or without a gun. Take the beautiful wood duck, for instance, which is always found near water although it also leads a land life. Then there is the big blue heron, which lives only on water life. The bitterns, the kingfishers and the ospreys depend upon waterlife for their food, and are an interesting part of our countryside. Take away their food—through pollution as well as any other cause—and they disappear. No food, no water birds. You don't find water birds haunting our dead streams which have been stifled by industrial poisons.

There is nothing unhappier in all outdoors than such a Pennsylvania stream killed by the human beings who live and work along its reaches. I'm sometimes surprised to hear birds singing in the trees beside their banks because the waters are so completely lifeless that you have the feeling everything about the stream should be dead.

The hunter is a citizen and frequently a family man, which gives him a double additional reason for wanting clean streams. As a citizen, he has pride in his State and community and there is no cause for pride in streams so filthy that they cannot be used for any purpose except that of open sewers. As a family man, he knows the need for recreation for himself, his wife and children—and ideal recreations are boating, swimming, canoe camping trips and other sports all involving water. There are miles of stream in this State where swimming is not only impossible but extremely unhealthy. There are miles where boating is unpleasant simply because of the stench, or where acids in the water are so corrosive that paint, hulls and motor parts are ruined. Incredibly enough, there is a certain amount of boating done on the Schuylkill and Delaware Rivers at Philadelphia even on hot summer days. Persons not accustomed to the odors of these streams have been known to turn pale and swallow hard to keep down their stomachs when necessity has forced them to cross the nauseating Delaware on a ferryboat; but the hardy Philadelphians who have become immune to the stench actually seem to find pleasure in the motorboats and yachts they use on the river.

The picture is admittedly black—but the hunter who resents the pollution of our waters may be reassured by the knowledge that this State is doing more to correct this evil than any other in the country. Last year, I visited every one of the forty-eight States on a water pollution survey—and wherever I went I found everyone interested in what Pennsylvania is doing. They questioned me about it in North Dakota, in

California, in Rhode Island, in the south and the middle west.

There are good reasons for the national interest in Pennsylvania's anti-pollution program. In the first place, sanitary engineers and others concerned with clean streams are aware of the magnitude of Pennsylvania's problem, especially where industrial pollution is concerned. They know that the manufacturers are a powerful influence in State affairs here—and they also know that the Clean Streams Act, or Brunner Bill, passed here is aimed impartially at correcting both municipal and industrial pollution. Most impressive thing to persons outside the State is the strict enforcement of this strict law, and they give major credit for it to Governor James Duff who has become nationally-known as an unswerving clean streams man since he was attorney general.

In fact, (and this is strictly an unbiased opinion based entirely upon what I observed in other States) Governor Duff's stature as an exponent of clean streams has grown to the extent where he is considered the leading political personality in the nation in favor of ending pollution. This has been achieved by a consistent determination to enforce the State's laws concerning pollution (sometimes at the cost of arousing resentment) and by carrying the message to other states at conferences of governors and other meetings. Sanitary engineers in other States, where political influences too often handicap them in carrying out their local anti-pollution laws, frequently said with admiring amazement: "Duff really means it, doesn't he?"

Best proof that he does mean it and that Pennsylvania's law is not mere words on paper is the State-wide drive against pollution under way now. It affects every municipality, every industry; but it is most evident at present along the Schuylkill River since the State hopes to clean up by watersheds—and no watershed entirely within the State possibly could be worse off than the Schuylkill. This stream which flows from

the Tamaqua-Pottsville coal mine areas southeast to Philadelphia is being flushed out, dredged out and completely renovated in the first operation of its sort in America. No other river has ever been the subject of a bath from top to bottom as the Schuylkill is. Early this year, I toured the river from Philadelphia up to its tiny headwaters on the two branches above Port Clinton and can say this much, based upon personal knowledge of all other stream cleaning programs in the country: There is nothing to match the Schuylkill project. If the Schuylkill can be cleaned up (and it is being cleaned up) then any stream in Pennsylvania or any stream in the nation can be cured of its pollution ills.

There is one thing that must be made clear, though. As a Pennsylvania hunter interested in our State's wildlife, you cannot sit back contentedly and tell yourself that the situation is being taken care of. It is being taken care of at the present because of the outstanding work of a few men, *plus the public support given them*. The leaders would be powerless without that support, and they will be powerless in the future if the support bogs down in the slough of complacency. The individual must give every aid within his possibilities if the present program is to be pushed through to its completion—and completion means reasonably clear streams over the entire State. It will cost money, time and effort; but the outdoorsman, more than any other persons, realizes that it will be worth it.

This piece didn't start out to be any brief for Pennsylvania's clean streams program; but it became that because of one inescapable fact: It is *our* program, and it is up to us to put it across so that other States will continue to regard Pennsylvania as an extraordinary leader in a national project to end pollution. If we can maintain Pennsylvania in that position, we will reap the benefits in creeks and rivers restored to something approaching their original condition, and a furtherance of our pleasure in the outdoors.



"The thought of muskrats living anywhere except in and around water is absurd."



"Stream bottoms, with their dense growths, also provide cover for many animals which are not dependent upon the creeks for anything else except an occasional drink."

The Pennsylvania Game Commission—

Streamlined for Better Service

ON AUGUST 31, 1948 at Indiantown Gap, Seth Gordon, who for 25 years had guided the Game Commission's "ship of State" on many rough voyages and over some stormy seas, relinquished the reins to Tom Frye, the new Executive Director.

Frye, who took the helm immediately, laid down his course of action when he said, "My early efforts will be expended to a great extent in examining the present tools with which you work and, later, designing better tools and developing more effective ways to use them. . . . The challenge to improve wildlife conservation, restoration, and management work in Pennsylvania is accepted. . . . I never accepted any position without a firm determination to do a better job than had ever been done. This is no exception! . . . So let us become energized with the spirit of progress and filled with the will and determination to achieve and even surpass every objective we set for ourselves."

Those words fell upon the ears of the assembled Commission employes, sportsmen, State officials, and other distinguished guests, but no sooner had they faded away, than there was action to put them into practice.

Today, and ever since May 31, 1949 when the Commonwealth's Executive Board approved a streamlined organization for the Pennsylvania Game Commission, there is an organization built to perform the work to be done, with a foundation of sufficient strength to carry an anticipated heavier burden as the years go by.

"But we must constantly recognize the need for change and improvement to keep pace with the ever changing conditions and the more difficult problems," said Frye. So it was time for a change, time for improvement to keep pace with the present day problems, because there was need for progressive thinking and aggressive action.

Today the sportsmen of Pennsylvania have a streamlined organization that will go far toward setting an example for other states to follow.

The Commission

It is headed by eight commissioners, each well informed on the subject of wildlife conservation and restoration who serve on a non-partisan basis. They serve eight year terms without compensation and two are appointed every odd-numbered year in January. This system has the effect of keeping capable and trained men as members of the Commission without danger of wholesale change and loss of experience and efficiency.

The Executive Director

Under the law the Executive Director is chosen by the members of the Commission to serve as the chief administrative officer and to have charge of all activities under the jurisdiction of the Commission. Likewise under the law, the Executive Director shall be the Chief Game Protector and shall have charge of, direct, supervise, and control all other Game Protectors and employes of the Commission.

Wildlife Conservation Bureau

Examining the work of the Commission through the eyes of the businessman reveals that it is engaged primarily in wildlife conservation and restoration work of all kinds. "Why not create a Wildlife Conservation Bureau," said Frye, "with a Director responsible for the efficient management of our statewide activities?" "That is exactly what we should have," said Jay Gilford who at the time was the Director of the Bureau of Field Management. With that point agreed to, the Bureau was set up like a keystone for the new structure and "Jay" became its director.

Land Utilization Division

Examining further, let's see what kinds of work are performed under the jurisdiction of this Bureau. All that we do is the product of land itself and we have land, all kinds—forests, agricultural

and marginal, owned, leased and under agreement for the sole purpose of conservation, benefiting wildlife and producing better sport for the hunter.

By creating a Land Utilization Division with a Chief responsible for all land activities throughout the State, we have allocated the responsibility for the utilization of the lands under our control. But who should be the Chief? Training and experience pointed to Court Freeburn, so "Court" drew the assignment. But since it was much bigger than a "one man job," it was necessary to provide Freeburn with sufficient assistants to accomplish his high objectives.

Food and Cover Section

It is not easy to forget any session of a General Assembly and especially the last one. "Food and Cover" seemed to be the watchword of the 1949 session which left an earmarked \$1.25 from each resident hunter's license fee to be used principally for "food and cover" for wild game. Providing food and cover—or food and shelter, whichever you prefer,—for wildlife all over Pennsylvania, making it effective, making each dollar buy the maximum possible, and providing the most good isn't exactly a simple task. How can we get the most good from each dollar spent?

It was decided to place that important function in the Food and Cover Section of the Land Utilization Division and assign the responsibility to John Sedam who has had many years of training and experience in this field. With "John" on the job, we not only can expect to find more and better food and cover throughout the State, but sportsmen's organizations can anticipate being shown how to get the most for each of their dollars spent on "food and cover for wildlife."

Farm-Game Cooperative Section

"Never forget the farmer" are words that President Ross L. Leffler is heard to say almost every time that wildlife problems are discussed, followed by, "and be sure that his interests are not overlooked." True, the farmer plays a very important part in wildlife management. He deserves every consideration possible; thus, to look after his interests there has been made a part of the Land Utilization Division a Farm-Game Cooperative Section. The duties and responsibilities of this unit include looking after the interests of the farmer and landowner and expanding the acreage of Cooperative Farm-Game Projects from the present 600,000 acres to approximately one million acres. Benefits from this program accrue to both the farmers and the hunters alike. But who should have charge of this cooperative planning? The answer to that was simple!

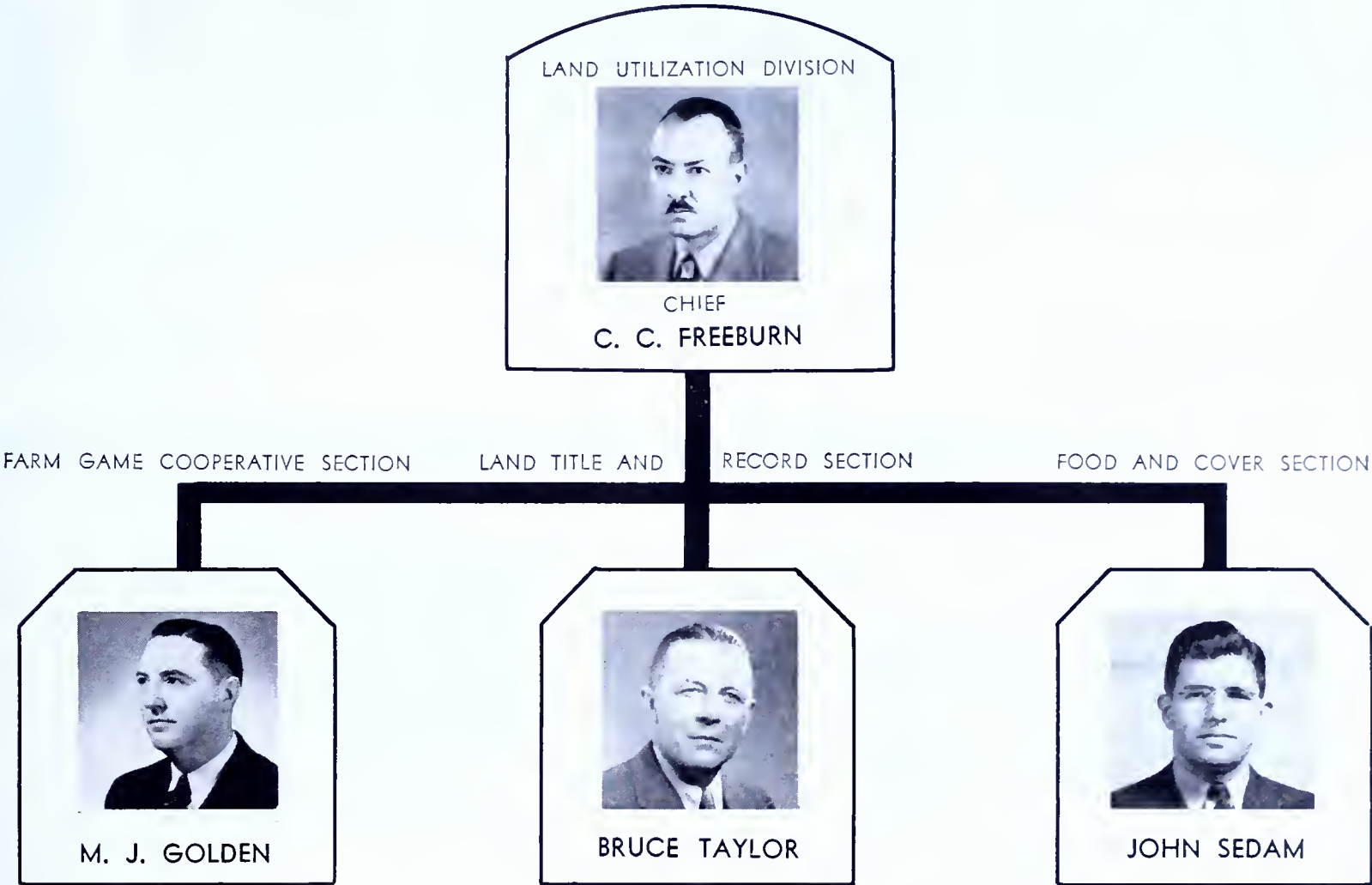
There was one man in Pennsylvania whose experience and ability in this kind of work fitted him ideally for the position. Nobody in southeastern Pennsylvania wanted to see Supervisor Merton Golden leave Division "A", but his services were needed on a state-wide scale. So "Mert" is on the job and is likely to be found in company with any farmer or landowner, any place and at any time, "helping the farmer,"—and he'll always have a smile!

Land Title and Record Section

But we also buy some land and lease considerable acreages so records must be kept, maps made, and titles searched. There was a time when land purchases were a big and important function of the Commission and "Major" Gard Conklin set some fine records in that work, records that will not likely be surpassed. Since "Gard" retired, his second line of defense and capable counsel, Bruce Taylor, has taken over the reins. "Bruce" has charge of all records, titles, mapping, engineering, and related work, and you can be sure the work will be done "according to law." (Mr. Taylor is an attorney-at-law.) He now becomes the Supervisor, Land Titles and Records Section, and he can be relied upon to do a real job in any undertaking.

FOOD AND SHELTER FOR WILDLIFE

THE JOB FOR THE LAND UTILIZATION DIVISION



Wildlife Protection Division

You can produce the most perfect food and cover, and “plant” birds and animals galore, but unless they are protected from predators—four-legged, two-legged, winged and mechanical—you can have complete failure. They need to be fed under certain conditions and treated as Nature’s children. Those facts spell the need for Wildlife Protection. To provide these necessities, a Wildlife Protection Division, responsible for this work on a statewide basis was established. Who would be the Chief? Thomas F. Bell, genial and efficient Supervisor, Division “G” has been called from Ligonier to Harrisburg to see that the state’s wildlife is protected. “Tom” will be found “on the job” strengthening the arm of law enforcement and educating the hunters on the subject of law observance and safety.

But protecting the Wildlife of Pennsylvania is not a one man job. Finding an assistant for “Tom” was only complicated by the determination of the sportsmen of Division “F” to keep Hayes Englert as Supervisor at Oil City. He was recognized by the sportsmen of northwestern Pennsylvania as their friend and they wanted him to stay with them. That was a fine compliment to “Hayes” as well as to the Commission which had already decided that he was more essential to all of Pennsylvania’s sportsmen than to any one group. He’ll now be found doing a good job and working for every sportsmen in Pennsylvania.

Bounty Claims Section

While not shown on the pictorial organization chart, the Bounty Claims Section is part of the Wildlife Protection Division. Bounties are paid on certain species under the theory that incentives for the control of predators can be helpful in maintaining a satisfactory supply of wildlife. One thing sure, claims for the payment of bounties when once approved by Harold L. Plasterer mean that all was in order. “Pat” knows his job from the tip of the nose or beak to the tips of the tails. He’s now operating a new system of payments under which the Bounty Claims check is issued by the State Treasurer instead of by the Commission.

Game Propagation Division

The Commission operates four game farms—tracts that are used for raising game birds—turkeys, pheasants, and bobwhite quail, and for distributing them throughout the Commonwealth. It also buys, live-traps, and distributes game. These functions have long been recognized as essential to an adequate and well balanced game management program, but instead of these field activities being under the “operating” side of the organization, they were lodged with the “administrative” side. To effect a well balanced operating organization, the Game Propagation Division was re-named and placed under the Wildlife Conservation Bureau.

Who would fill the position of Chief, Game Propagating Division? The man responsible for Pennsylvania’s outstanding work in game propagation—Earl Greenwood. So “Earl”, who will be capably assisted by Ralph Britt, and the Superintendents at the Game Farms,—Vernon Warfel, “Ike” Baumgardner, Leon Keisser, and Charley Pfeiffer,—can be relied upon to continue the fine work of the past and to expand the objectives to meet the future needs.

Wildlife Conservation Divisions (Field)

To carry on the various wildlife activities on a statewide basis could only be done effectively through field organizations. For this purpose the former seven Feld Division offices were retained intact but renamed Wildlife Conservation Divisions. While the Supervisor is responsible for all activities except the Game Farms within his geographical area, he has an assistant (dependent upon needs) who specializes on Land Utilization work, another on Wildlife Protection work, and in some cases, a Conservation Education Assistant who handles all types of contacts with the public, schools, and sportsmen’s organizations.

By reference to the inside of the front cover of GAME NEWS, names, addresses, and phone numbers of the Division Supervisors will be found, as well as the counties under the jurisdiction of each. The District Game Protector under the present system is responsible for all activities within his geographical district, but is assisted by local help when necessary and by the Food and Cover Corps when major work of that nature is undertaken.

THE PENNSYLVANIA GAME COMMISSION



PRESIDENT

ROSS L. LEFFLER



VICE PRESIDENT

ROBERT LAMBERTON



MEMBER

COL. NICHOLAS BIDDLE



MEMBER

G. I. PHILLIPS

ADMINISTRATION BUREAU

DIRECTOR PUBLIC RELATIONS



DIRECTOR

ROLLIN HEFFELFINGER



DIRECTOR

R. D. REED

ACCOUNTING AND SERVICE

DIVISION

CONSERVATION EDUCATION
DIVISION

ROSS LEFFLER
SCHOOL OF CONSERVATION

WILDLIFE RESEARCH DIVISION



COMPTROLLER

N. E. SLAYBAUGH



CHIEF

LEO A. LUTTRINGER



CHIEF

W. C. SHAFFER



CHIEF

ROBERT McDOWELL

WILDLIFE CONSERVATION DIVISION

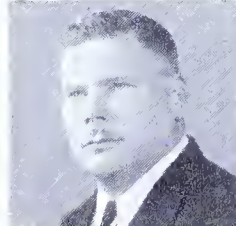
SUPERVISOR



A

MORRIS D. STEWART

SUPERVISOR



B

C. C. STAINBROOK

SUPERVISOR



C

ROBT. E. LATIMER

IVE OFFICE

THE PENNSYLVANIA GAME COMMISSION



E. DIRECTOR
M. FRYE



MEMBER
HAROLD MOLTZ



MEMBER
DR. H. E. KILGUS



MEMBER
JOHN C. HERMAN



MEMBER
B. K. WILLIAMS

ASSISTANT TO EXEC. DIRECTOR

WILDLIFE CONSERVATION BUREAU



WILBUR M. CRAMER



DIRECTOR
JAY C. GILFORD

LAND UTILIZATION DIVISION

WILDLIFE PROTECTION

DIVISION

GAME PROPAGATION DIVISION



CHIEF
C. C. FREEBURN



CHIEF
T. F. BELL



CHIEF
EARL S. GREENWOOD

WILDLIFE CONSERVATION DIVISION

SUPERVISOR



M. E. SHERMAN

SUPERVISOR



TEMPLE A. REYNOLDS

SUPERVISOR



GEORGE L. NORRIS

Administration Bureau

As a result of the statewide wildlife conservation problems and activities, the handling of finances, compiling of statistics, maintenance of records, etc., incidental thereto, certain and varied administrative work must be performed. This is essential if the Commission is to perform its obligations under the law in an efficient, economical, and progressive manner. We therefore find four separate and distinct lines of work that must be carried on to produce optimum results in accounting and office work, conservation education, Ross Leffler School of Conservation, and wildlife research. These activities, although generally unrelated, play an important part in the overall work of the Commission. Each plays an important part, but none would be necessary if the work of the Wildlife Conservation Bureau were abandoned; thus they might be considered as administrative service units.

For the purpose of administration the four functions have been set up as four divisions of an Administration Bureau. With the retirement of Major Gard Conklin who had been the Director of a bureau of the same name for many years, the logical successor was Rollin Heffelfinger. "Rollin" is entering a new field of endeavor with many problems facing him but, if past performance is any criterion, he will bring to his new post a ready ability in a genial manner.

Accounting and Service Division

A comptroller has often been referred to as a "necessary evil." With a budget of \$4,000,000 this year, every penny of which must be accounted for, Nelson E. Slaybaugh has just about as many things to look after as the manager of a three-ring circus. All the office work, records, statistics, personnel, handling of Federal Aid funds, payments, and vouchers, results in "Sam" being busy and rushed every minute. Few people will ever realize the multitude of details that are required from him and his employes, because the Game Commission is looked upon as a small organization. Small, yes, but like a small watch compared with a big one—It must have all the works and everything "ticking."

Sam will continue to be assisted capably by Assistant Comptroller Howard Fraim in charge of the Accounting Section and Clarence J. Weaver in charge of all other office and maintenance services—the Service Section.

Conservation Education Division

Conservation Education is what the Commission has been spending money to accomplish for many years but it was formerly called Public Relations and there was much reaction against it. It wasn't what was done that was criticized—it was what it was called. Now we call things what they are—not only in naming Conservation Education but in everything else so there will be no reason for misunderstanding. The GAME NEWS, generally referred to as the best game publication in the nation, is one of the publications of this new Division. Bird bulletins, charts, and all kinds of valuable and interesting literature are also written, edited, and published by this unit. But what has been done is no criterion for what is coming. A year from now we plan to have our publication program so much better than today that you wouldn't recognize it. Exhibits, radio, lectures, and all kinds of contacts with schools, educational groups, sportsmen's organizations go to make up the work of the Conservation Education Division headed by "Chief" Leo Luttringer, known as "Leo" to all.

Leo will be assisted by Willard Johns, the new Editor of the GAME NEWS. "Will" has been very much in evidence in the past, but somewhat behind the scenes. Now his name appears "at the top" in the GAME NEWS.

Ross Leffler School of Conservation Division

The Ross Leffler School of Conservation, first school of its kind in America, and a model being copied by many other states, becomes a Division under the reorganized system. Complete training for every would-be Game Protector and Game Propagator is offered by this school—one whole year's conservation training before they are qualified to serve even on a probationary basis. Refresher courses for regular personnel to keep them up to date and "on their toes" are part of the services performed by this division. Headed by "Chief" W. C. Shaffer, who is presently "on loan" to Florida to open a similar school for that state, "Bill" will be found using the "needle of learning" to produce the finest lot of officers ever graduated by any school. "Bill" is never satisfied with anything short of the best.

"Bob" Lichtenberger will not only be "Bill's" right hand man, but most likely will be thought of by the students as "Prof". His years of experience will be useful in keeping the school and the graduate officers as "tops".

Wildlife Research Division

What we don't know, we try to learn. There are many unknown or uncertain things about wildlife. To learn the answers would mean success unknown in the past, reduced costs, less time and effort. Research into wildlife problems requires time, effort, study, patience, and money. As we learn, we improve. That is why so many kinds of research studies are being conducted. Most Research for the Commission is conducted on a cooperative basis with the Federal Government which has been financing 75% of the cost. To perform this work there is included a Wildlife Research Division headed by Chief Robert D. McDowell. "Bob" is a typical "researcher" seeking the truth even when it hurts.

EXECUTIVE STAFF

Assistant to the Executive Director

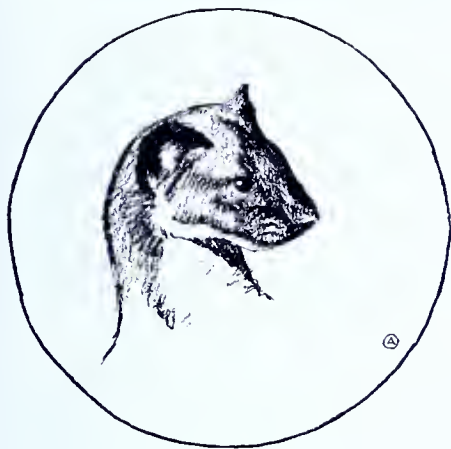
"Every sportsman knows the answers to all the problems but seldom do two agree," goes the familiar saying. And they not only say it but they write their ideas, convictions, criticisms, etc. to the Commission. Not in single page, but single space and multiple page letters. The time consumed in reading and replying to these letters, if handled by the Executive Director, would require such a large percentage of his effort that constructive thinking and planning would be practically out of the question. To assist the Executive Director in handling this and all routine office work, as well as administrative affairs, a position has been created—"Assistant to the Executive Director." From the standpoint of length of service with the Commission, ability, and all around experience in handling affairs of the Commission, there is none with the background of Wilbur M. Cramer who has served 35 years with the Commission. Wilbur is a welcome addition to the staff and much needed from the standpoint of courteous, prompt public service.

Director of Public Relations

"Keep the newspapers, magazines, sportsmen, and the public informed of our doings" has been heard from many quarters. That's a man's job in itself and it's quite a capable man who has been given the assignment of Director of Public Relations. Robert Reed who was formerly the Public Relations Assistant at Ligonier (Division "G") did such a fine job there that there was no question who should take over this function at Harrisburg. Bob is writing the news releases, developing ways and means of doing a job for the columnists, and in general looking after the Commission's statewide public relations work.

WILDLIFE CONSERVATION COSTS

IN PENNSYLVANIA



By
NELSON E. SLAYBAUGH
Comptroller
*A Report on the Finances
of the Game Fund
During the Fiscal Year
June 1, 1948 to May 31, 1949*



SINCE last submitting the report which showed how the Commission used the money paid into the Game Fund during the fiscal year which ended May 31, 1948, seasons have come and gone. We hope your lives have been enriched to some extent by our efforts. However, more important than the past are the future plans and our work to provide more sport, more game, more real relaxation and pleasures from days afield. Our efforts are being used to accomplish those objectives for you, and for the benefit of all wildlife.

To provide food, cover and protection for wildlife, as well as to propagate it and distribute it in suitable habitat, places tremendous responsibilities on those who guide wildlife management activities. It means long-range planning, business administration, hard work, long hours and constantly being open minded to the extent of learning and doing everything possible to obtain better results. Everything that is done costs money, much more today than a few years ago, so increased expenditures for any purpose today are only natural and in line with the present and past purchasing power of the dollar.

Your Commission has much to be proud of and nothing that it desires to conceal. A sincere and determined effort is made constantly to obtain for the benefit of our wildlife and the sportsmen the highest possible return from each dollar spent. Figures on paper do not explain, nor reveal the trials, tribulations, the long hours, the hard work, or the personal sacrifices of those who take part in the wildlife management work. For example, the Game Protector is subject to call and duty all hours of the day and night, and seven days a week. Some of the administrators work from 75 to 100 or more hours per week, and the Commissioners give freely of their time, effort and money for the benefit of wildlife and the sportsmen without as much as one cent of compensation in return. How many public spirited men and employes can be found in other lines of endeavor who give so much for so little, when the hourly compensation is taken into consideration and would they do it if it were not for the interest in the work and for wildlife betterment?

Answering letters of criticisms from hunters, who all too often do not have the

facts or understand the objectives of the Commission, creates an additional burden at the expense of constructive effort.

However, constructive criticism and suggestions for improvement are always welcomed and sought, but final decisions must be made on the basis of producing the most good for the greatest number, so it must be recognized that all cannot be pleased at all times.

What has been done during the last year is now history. It cannot be changed. We can only benefit by our experience and prevent recurrence of any errors that we found.

Figures are cold, statistics reveal very little in game management, because there are so many "unknowns," but we feel assured that nothing is left undone that is possible to improve hunting in Pennsylvania, to keep the Keystone State foremost in game management and wildlife restoration in our nation.

Our financial picture is not complicated. Therefore, for the fiscal year beginning June 1, 1948 and ending May 31, 1949, we relate the following simple story:

Beginning the year with a Cash Balance in the State Treasury in the amount of \$1,917,483.92, but with bills awaiting to be paid in the amount of \$170,912.34, we had a net cash balance of \$1,746,571.58.

During the year we received monies from various sources which were deposited in the Game Fund, as follows:

Hunters' Licenses (After deducting the Issuing Agent's Commission) ..	\$2,037,917.34
Game Law Fines	148,925.80
Special Game Permits (Fur Dealers, Taxidermists, Game Propagators, Etc.)	17,503.00
Interest on Deposits	17,251.31
Sales of Forest Products from Game Lands	92,307.59
Sale of Animal Skins	4,696.83
Sale of Unserviceable Property and Equipment	4,829.65
Rental from Commission-Owned Buildings and for Rights-of-Way, etc.	11,544.47
Sale of Publications (Principally Game News subscriptions)	29,699.31
Federal Aid for Wildlife purposes (75% of cost of approved projects) ..	254,882.29
Miscellaneous Items	3,478.99
Total Receipts from All Sources..	\$2,623,036.58
Unused Balance of Bounty Account refunded to State Treasury	73,424.00
Total Deposited in Game Fund during year	\$2,696,460.58

With what was on hand at the beginning of the year (\$1,746,571.58) and what was deposited during the year (\$2,696,460.58) there was accumulated from all sources \$4,443,032.16.

During the year \$3,035,537.01 of the total sum accumulated was spent for the following purposes:

Executive Office, Accounting and Office Expenses	\$ 146,049.11
Propagation, Purchase and Distribution of Game	618,631.33
Research and Planning for Wildlife Improvement	91,243.77
Land Titles and Records Including purchase of land	111,494.35
Land Utilization Operations Throughout the State	904,479.62
General Field Operations Including Law Enforcement	615,720.27
Predator Control and Bounty Claims	217,357.79
Training of Personnel including Class of Student Officers	95,485.56
Public Relations, Information and Conservation Education	235,075.21
Total	\$3,035,537.01

By developing a new system, which was approved by the Budget Secretary, all bills were paid by the Treasury Department as of May 31, 1949 so there no longer exists any difference between the accounts of the Commission and the Treasury Department. Since there was accumulated \$4,443,032.16 and there was spent \$3,035,537.01 we came to the end of the fiscal year with a cash balance of \$1,407,495.15 in the Game Fund. We arranged it purposely, so there should be no misunderstanding about the finances in the future.

There is one thing about our finances that seems to confuse many people. They say, "Why do you need a large cash balance as of May 31, each year?" "Why don't you spend it?" The simple answer is just this—during the months of June, July, August and September of each year the work must go on and be paid for as usual but that is a very lean period for receipts, so unless at least \$800,000 is saved from money accumulated and on hand each June 1 the work could not go on and be financed between June 1 and September 30. In other words that is because the bills to be paid during those four months are about \$800,000 more than the money received for the same period. Simple, isn't it, when you know the facts.

So instead of spending all the money accumulated each fiscal year, sufficient must always be saved to pay the bills during the lean period of receipts that follows or during the four months, June, July, August and September. By October 1 each year the new license money starts to come in and from that time there is sufficient money received currently to finance the program undertaken.

The \$800,000 provides only for the regular annual lean period of receipts but nothing for emergencies that could arise. What do you suppose would happen if the opening of the hunting season were delayed by Proclamation of the Governor due to extremely dry forest and field conditions which could result from a prolonged drought? It could easily delay the receipt of monies and develop a very serious financial situation since the Commission has no means by which it can borrow any money for any purpose, at any time. These facts should make any person realize that we must be both business-like and careful in our financing.

Are the figures correct? Are the accounts in order? Those two questions are only fair and might be asked by anyone.

At the time this article is being written no formal audit for the period had been made by the Auditor General. However, every bill of every kind is audited by the Auditor General, before payment is made. It is worthy of note, however, that during the four previous fiscal years, no criticism or suggestions for improvement of any kind was made after auditing the affairs of the Commission. Since the same or better standards have been maintained during the year reported herein, it is reasonable to assume that the affairs of the Commission are handled in an equally efficient manner. We try to improve, constantly.

That's the simple story of our finances for the last fiscal year.

Now for the Details

For the benefit and information of those who are interested in more details, certain statements and charts are made available with this article. By looking at the pie chart and referring to Table No. 1, you will find in greater detail the functions for which the monies were used and the number of cents of each dollar expended that was used for each purpose.

By reference to Table No. 2 you will find the Cash Balances in the Treasury Department at the beginning and ending of the fiscal year, the receipts from the various sources during the year and the total funds available during the year. It also shows the various classifications of expenditures that comprise the total cost of each organizational unit as well as the total spent by all units for each classification.

State Wide Field Operations

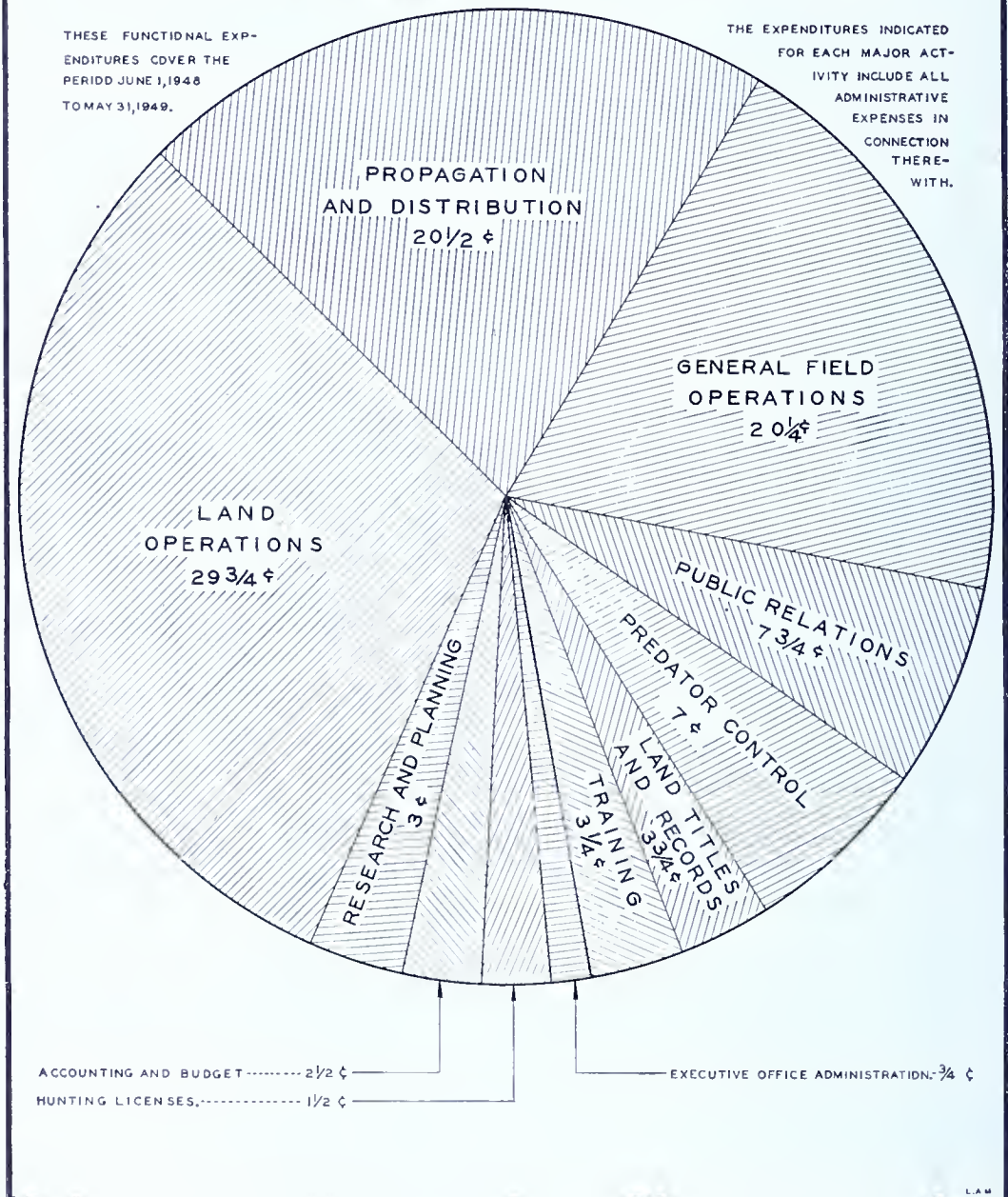
This is the fourth consecutive year for which a rather detailed analysis of field expenditures pertaining to General Field Operations and Land Operations is reported.

The details are shown as follows:

HOW THE SPORTSMAN'S DOLLAR WAS INVESTED

THESE FUNCTIONAL EXPENDITURES COVER THE PERIOD JUNE 1, 1948 TO MAY 31, 1949.

THE EXPENDITURES INDICATED FOR EACH MAJOR ACTIVITY INCLUDE ALL ADMINISTRATIVE EXPENSES IN CONNECTION THEREWITH.



General Field Operations

Game Law Enforcement on a Statewide basis	\$417,801.41
Feeding of Game in the Wild	29,179.34
Cooperating with Conservation and Law Enforcement Agencies	26,958.05
Investigating Game Damage Complaints	11,829.55
Payment to Retirement System for Employees	8,776.90
Share of Rentals, light, heat, janitor service, etc., for seven field Division Offices	8,429.10
Cost of Issuing Special Permits of Various Kinds	4,540.79
Insurance, Bonds, Workmen's Compensation, etc.	1,251.82
Various kinds of essential field services not directly chargeable to items herein set forth	72,369.16
General administrative expense chargeable to this activity	34,584.15

Total cost during the fiscal year for this purpose was \$615,720.27

Table No. 1
SUMMARIZATION OF EXPENDITURES BY FUNCTIONS
FISCAL YEAR ENDING MAY 31, 1949

		<i>Part of Dollar</i>
<i>Land Operations.</i> Management of State Game Lands, Cooperative Farm-Game Projects and other leased areas totaling 1,312,318 acres. Also fixed charges in lieu of taxes	\$904,479.62	29¾¢
<i>Propagation and Distribution.</i> Operation of game farms, purchase of game, wild game transfer, distribution of game ..	618,631.33	20½¢
<i>General Field Operations.</i> Salaries and expenses for enforcement of game laws, assistance in enforcement of fish, dog and forest laws, and numerous other field activities, and feed for wild game	615,720.27	20¼¢
<i>Conservation Education.</i> GAME NEWS, publications, exhibits, motion pictures, radio broadcasts, attending Sportsmen's meetings, etc.	235,075.21	7¾¢
<i>Predator Control.</i> Bounties on noxious animals; predator control in the field, and Bear Damage Claims (\$1,335.95)	217,357.79	7¢
<i>Land Titles and Records.</i> Purchasing and leasing of land, granting or securing easements, legal matters affecting lands ..	111,494.35	3¾¢
<i>Training.</i> Training programs for the Commission's officers, including school maintenance and class of Student Officers ..	95,485.56	3¼¢
<i>Research and Planning.</i> Wildlife studies to determine practical methods for developing management programs	91,243.77	3¢
<i>Executive Office, Accounting and Office Expenses.</i> (\$146,049.11 subdivided below)		
<i>Accounting and Budget.</i> Audit of accounts and bookkeeping, advertising seasons and bag limits, personnel matters; supervision over purchases, equipment and supplies	75,417.05	2½¢
<i>Hunting Licenses.</i> Including tags, applications, reports	46,861.79	1½¢
<i>Executive Office Administration.</i> Salaries and expenses of Executive Office, and expenses of Commissioners	23,770.27	¾¢
TOTAL EXPENDED FOR ALL PURPOSES	\$3,035,537.01	100¢

Land Operations

Maintenance and development of State Game Lands and Primary Refuges ..	\$230,461.06
Food and Cover Projects on State-owned lands	158,086.82
Developing and Operating Farm Game Projects	95,960.25
Establishing and Maintaining Farm Game Projects	52,158.90
Protecting Farm-Game Projects	23,746.43
Conservation Development Work in Coop. with Federal Govt.	87,737.34
Browse Cutting on State Game Lands	36,287.54
Maintenance of State Game Propagation Areas	6,546.74
Maintenance and Development of Auxiliary Game Refuges, on Privately Owned Lands	4,429.19
Maintenance of Dog Training Areas	663.81
Purchase of Equipment (trucks, tractors, graders, etc.)	83,682.21
Share of Rentals, light, heat, janitor service, etc. for seven Field Division Offices	8,429.12
Insurance on Equipment, Bonds, Workmen's Compensation, etc.	2,952.55
Payment to Retirement System for Employees	5,387.07
Newspaper Advertising of Timber for Sale, etc.	999.17
Various kinds of essential field services not directly chargeable to items herein set forth	68,625.72
General administrative expense chargeable to this activity	38,325.70

Total cost during the fiscal year for this purpose was \$904,479.62

Capital Investments

In the matter of capital investments, the Commission is somewhat similar to private industry. Wildlife Management tools consisting of land, buildings, pick-up trucks, heavy motorized equipment, etc., which are needed to carry on the work. From June 1, 1928 to May 31, 1942 a large percentage of the money for capital expenditures was for the purchase of State Game Lands. Today only a small amount is spent for lands. The need has shifted to the purchase of equipment and other items required in connection with the greatly expanded food and cover development program on lands owned or leased. The statement below shows the actual consideration paid for land, together with the estimated value of other items as of May 31, 1949, but excluding obsolete equipment:

State Game Lands (1920 to 1949) ...	\$4,107,272.22*
Buildings on State Game Lands ...	127,645.00†
Game Propagating Farms (Including land, buildings and equipment) ..	468,556.65†
Conservation School (Including buildings and equipment)	35,048.55†
Equipment (Including automobiles, trucks, tractors, graders, etc.) ...	227,127.67†

Total \$4,965,650.09

* Consideration paid for lands including title and survey costs.

† Estimated values at May 31, 1949.

To safeguard these investments and to secure the maximum production of wildlife from them, money must be provided in the annual budget to maintain them which is only good business.

Hunting Licenses Issued

In order that sportsmen may have information on the trend of hunting license sales since the license law was enacted in 1913, license sales at five-year intervals from 1913 to 1938, and yearly from 1939 to 1948 are here shown:

Year	Resident	Non-resident	Total Licenses Issued
1913	305,028	No Record	305,028
1918	311,290	478	311,768
1923	497,216	2,328	499,544
1928	437,727	1,190	438,917
1933	524,337	4,966	529,303
1938	654,146	7,584	661,730
1939	653,852	9,049	662,901
1940	666,420	12,748	679,168
1941	675,434	10,922	686,356
1942	640,821	8,394	649,215
1943	570,901	11,833	582,734
1944	593,917*	13,983	607,900
1945	696,394*	17,227	713,621
1946	832,846*	23,174	856,020
1947	822,423*	28,012	850,435
1948†	853,227†	28,128†	881,355†

* Includes free licenses issued to members of the armed forces: 1944, 264; 1945, 32,373; 1946, 7,418; 1947, 2,876; 1948, not available at this time.

† Preliminary, subject to minor changes.

Editorial Note

Some criticism has been heard in the past concerning the fact that the Commission's Annual financial Statement for each fiscal year ending May 31 is not published in the GAME NEWS in an earlier issue.

Some improvements made in recent months have permitted the publishing of the financial story for the last fiscal year in this September issue, compared with the December issue for the previous year's report. To print this story in the September issue means that all the material had to be in the printery not later than July 20th. Beginning next year it is our hope to have the statement appear in the August issue of GAME NEWS.

Table No. 2

STATEMENT OF REVENUE, EXPENDITURES AND CASH BALANCES
FISCAL YEAR JUNE 1, 1948 TO MAY 31, 1949

REVENUE	
Cash in State Treasury June 1, 1948 after bills submitted were paid	\$1,746,571.58*
Receipts June 1, 1948 to May 31, 1949:	
Hunters' Licenses (After deducting the Issuing Agents' Commission)	\$2,037,917.34
Game Law Fines	148,925.80
Special Game Permits (Fur Dealers, Taxidermists, Game Propagators, Etc.)	17,503.00
Interest on Deposits	17,251.31
Sale of Forest Products from Game Lands	92,307.59
Sale of Animal Skins	4,696.83
Sale of Unserviceable Property and Equipment	4,829.65
Rental from Commission-Owned Buildings and for Rights-of-Way, etc.	11,544.47
Sale of Publications	29,699.31
Federal Aid for Wildlife purposes (75% of cost of approved projects)	254,882.29
Miscellaneous Items	3,478.99
Total Receipts From All Sources	2,623,036.58
Add: Unused Balance of Bounty Account refunded to State Treasury	73,424.00
Total Deposited in Game Fund during year	2,696,460.58
Total Funds available during year	\$4,443,032.16

CLASSIFICATION OF EXPENDITURES BY ORGANIZATIONAL UNITS

CLASSIFICATION OF EXPENDITURES	Exec. Office and Acct'g. & Bud.	Propa- gation and Dist.	Research and Planning	Land Titles & Records	Land Opera- tions	General Field Opera- tions	Predator Control and Claims	Training	Public Relations	Total
Salaries	\$ 60,424.10	\$ 65,610.63	\$39,663.12	\$ 8,227.03	\$171,681.16	\$307,563.48	\$ 8,669.00	\$ 41,747.10	\$ 67,877.38	\$ 771,463.00
Traveling Expenses of all kinds, in- cluding auto mileage	2,862.60	12,675.65	12,895.82	1,160.80	51,740.51	129,404.06	65.04	18,362.93	18,907.91	248,075.32
Deputy Game Protectors:										
Wages	\$25,935.49									
Expenses	14,799.56					40,735.05				40,735.05
Cooperative Farm-Game Program (Total cost)		10,728.00		19,890.58	171,865.58					202,484.16
Wages (Land Management, etc.) ..					194,513.58	50,821.43				245,335.01
Wages (Game Farms, etc.)	6,214.04	109,595.85	21,144.19	3,535.07			3,110.68	10,210.38	5,465.10	159,275.31
Purchase of Game		134,878.88								134,878.88
Rabbit Trapping and Wild Game Transfer		28,916.40								28,916.40
Feed (For Game Farms and game in the wild)		109,587.95	250.00			8,744.54			41.92	118,624.41
Express and Cartage	3.40	1,179.51	4.76	75.18	2,172.42	2,181.74	61.19	323.87	758.54	6,760.61
Purchase of Lands (title and sur- vey included)				72,240.71						72,240.71
Payments in Lieu of Taxes to local taxing units		139.99			42,646.82					42,786.81
Building and Construction (Mostly on Game Farms)		57,428.88			13,464.01			4,668.17	250.00	75,811.06
Repairs to Buildings, Grounds and Equipment by Contract	284.65	1,462.10	35.00	123.33	6,926.56	131.50	26.77	511.85	887.80	10,389.56
Equipment (Mostly for land manage- ment and Game Farms)	2,548.36	14,939.88	1,358.36	1,677.44	83,682.21	17,226.77		2,315.93	5,916.41	129,665.36
Miscellaneous Supplies	1,351.83	44,217.79	5,532.98	433.08	93,087.41	17,863.10	206.24	10,507.88	17,125.77	190,326.08
Motor Supplies	943.60	8,371.38	840.36	292.53	13,653.24	10,070.61	18.62	704.00	1,676.17	36,570.51
Light, Power and Fuel		6,959.37		30.93	308.19	233.35		1,372.84	1,253.73	10,158.41
Insurance	458.92	835.65	202.93	150.53	2,952.55	1,251.82	39.29	134.88	934.58	6,961.15
Postage, Telephone and Telegraph..	9,266.13	1,493.97	214.03	682.38	8,759.14	8,789.70	1,526.90	547.91	3,329.69	34,609.85
Rental of Equipment, Offices, Auto Storage, etc.	541.14	5,307.32	895.11	1,281.74	37,360.91	6,827.23	301.14		2,697.33	55,211.92
Bounty Payments and Grants			6,000.00				167,077.00			173,077.00
Refunds of Receipts	20.00					1,326.00				1,346.00
Fees:										
Artists, Attorneys, Medical, Taxi- dermy, etc.		62.50	701.50	226.41	549.55	671.60		1,726.57	17,079.86	21,017.99
Bear Damage Claims							1,335.95			1,335.95
Predator Control Activities (Field)..							33,394.17			33,394.17
Other Maintenance Services and Ex- penses	701.72	93.94	21.79	90.74	574.02	961.99	123.75	874.99	1,246.92	4,689.86
Newspaper Advertising	5,982.37				999.17				219.50	7,201.04
Printing, Binding and Paper	5,860.93	1,927.06	353.08	618.87	2,155.52	2,139.40	725.99	278.87	87,468.87	101,528.64
Printing Hunters' Licenses, Tags and Misc. Forms—(Through Depart- ment of Revenue)	46,861.79									46,861.79
Payments to State Employees' Re- tirement System—(Through De- partment of State)	1,723.48	2,218.63	1,130.74	757.00	5,387.07	8,776.90	676.06	1,197.39	1,937.73	23,805.00
TOTAL EXPENDITURES ...	\$146,049.11	\$618,631.33	\$91,243.77	\$111,494.35	\$904,479.62	\$615,720.27	\$217,357.79	\$ 95,485.56	\$235,075.21	\$3,035,537.01
Cash Balance in State Treasury to credit of "Game Fund" May 31, 1949										\$1,407,495.15†

* State Treasury Accounts will show \$1,917,483.92 because bills amounting to \$170,912.34 were approved for payment and included in the report of expenditures of the Commission for the previous year, but not actually paid by the Treasury until after May 31, 1948.

† Excludes \$93,000 U. S. Savings Bonds, which can be converted into cash when necessary, and \$6,576 bank balance in Bounty Account for payment of checks issued but not cleared as of May 31, 1949. (The Bounty Account was discontinued after May 31, 1949, and all bounty claims are being paid by check issued by the State Treasury, thus producing a pre audit by the Auditor General of bounty claims the same as all other payments of the Commission.)



Gard. Conklin Retires From State Service

W. Gard. Conklin, Director of the Administration Bureau for several years, was retired from State Service on the first of August following more than 41 years of forestry and wildlife conservation services with the Commonwealth. His health made retirement at this time advisable.

He was born in Columbia, Lancaster County, in 1886, where he received a public school education. He graduated in 1908 from the Mont Alto State School of Forestry, Franklin County, where he earned the degree of Bachelor of Forestry, and was immediately employed by the Pennsylvania Department of Forestry.

After serving as Forester on the Jacks Mountain State Forest, Snyder and Union Counties, he was transferred to the Harrisburg office of that Department in 1913 to handle silvicultural and engineering functions on all of Pennsylvania's State Forests then aggregating more than 900,000 acres.

Mr. Conklin entered the military service in May 1917, took officers training and was commissioned First Lieutenant, Corps of Engineers. He served with 20th Engineers, a lumbering regiment, in this country and France for almost a year, and then was assigned to the Second Engineers, Second U. S. Division, serving with that renowned combat Division in France until wounded in action and evacuated to a U. S. Army Hospital a few days before the Armistice, November 11, 1918. He was awarded the Victory Medal with three battle clasps, the French Four-agere, the Purple Heart, and an honor badge especially awarded to members of the Second U. S. Combat Division, and was later commissioned Major, Engineers Reserve Corps, U. S. Army.

Upon return from World War I service, Mr. Conklin was again employed by the Department of Forestry on engineering work.

On April 1, 1920, he was "loaned" to the Pennsylvania Game Commission for six months to aid in getting its land purchase program under way. The six months lengthened into twenty-nine years.

In 1922, Mr. Conklin became the Game Commission's Chief of the Bureau of Refuges and Lands, and in September 1933 Director of Refuges and Lands. Upon reorganization of the Game Commission January 1, 1939



W. GARD. CONKLIN

the management of Game Lands was severed from acquisition activities and he was designated Chief, Division of Lands. This Division handled the purchase and leasing of lands for game management purposes.

When the Commission was again reorganized December 1, 1946 into two Bureaus, Mr. Conklin was designated Director, Administration Bureau, which included the Division of Accounting and Budget, Division of Propagation and Distribution, Research Division, and the Land Titles and Records Unit. His retirement took place coincident with another Commission reorganization in July 1949.

Mr. Conklin can recall with pride many accomplishments effected under his leadership. He directed all activities connected with the acquisition of almost 900,000 acres of State Game Lands and leasing the hunting rights for about 700,000 acres of private lands, providing a lot of hunting for sportsmen of this State. He helped devise, and worked out many details, of the Commission's now famous Cooperative Farm-Game Program, and played no small part in having transferred 14,000 acres of the Tobyhanna Military reservation from the Federal Government to the Game Commission, now set apart as State Game Lands.

Gard. is proud that his many friends re-

Winners in Employee Story Contest Announced

Winning entries in an outdoor story contest for Commission employees were recently announced. The contest was patterned after a similar competition sponsored by the Commission for GAME NEWS readers a year ago and all manuscripts entered were judged by Commissioner John C. Herman, Dauphin; J. Alden Knight, Williamsport, nationally known author of outdoor stories; and Bill Wolf, Philadelphia, outstanding feature writer for *Sports Afield* Magazine and frequent contributor of articles appearing in GAME NEWS.

Game Protector Ted Carlson's "Some Bare Facts on Hibernation" won top honors in the competition. Carlson is presently assigned to District E-6 with headquarters in Johnsonburg. Second prize was awarded to Game Protector Miles L. Reeder, Lock Haven, and former Special Service Assistant Bob Parlaman, Kingston, won third place honors. Other prize winning entries were submitted by Game Protector L. L. Logan, Delmont; Wilbur M. Cramer, Harrisburg; Game Protector Claude B. Kelsey, Port Allegany; Chas. F. Stambaugh, Mechanicsburg; Game Protector J. M. Haverstick, Lancaster; R. D. McDowell, Harrisburg; Vernor T. Warfel, Schwenkville; and Carl C. Stainbrook, Forty Fort. Future issues of the GAME NEWS will feature many of these true, outdoor stories.

spect him as a genuine conservationist. He never fishes although, when on the Jacks Mountain State Forest, helped place many cans of fingerling trout in the streams. He hunts very little and "boasts" that he has never killed the legal bag limit.

In commenting on Gard. Conklin's retirement, President Ross Leffler said that his services as Chief of the Division of Lands were outstanding, and that in dealing with the various property holders he showed a keen insight into land values from the viewpoint of their utility for hunting purposes as opposed to those for purely forest use, and that he could leave with the satisfaction of a job well done.

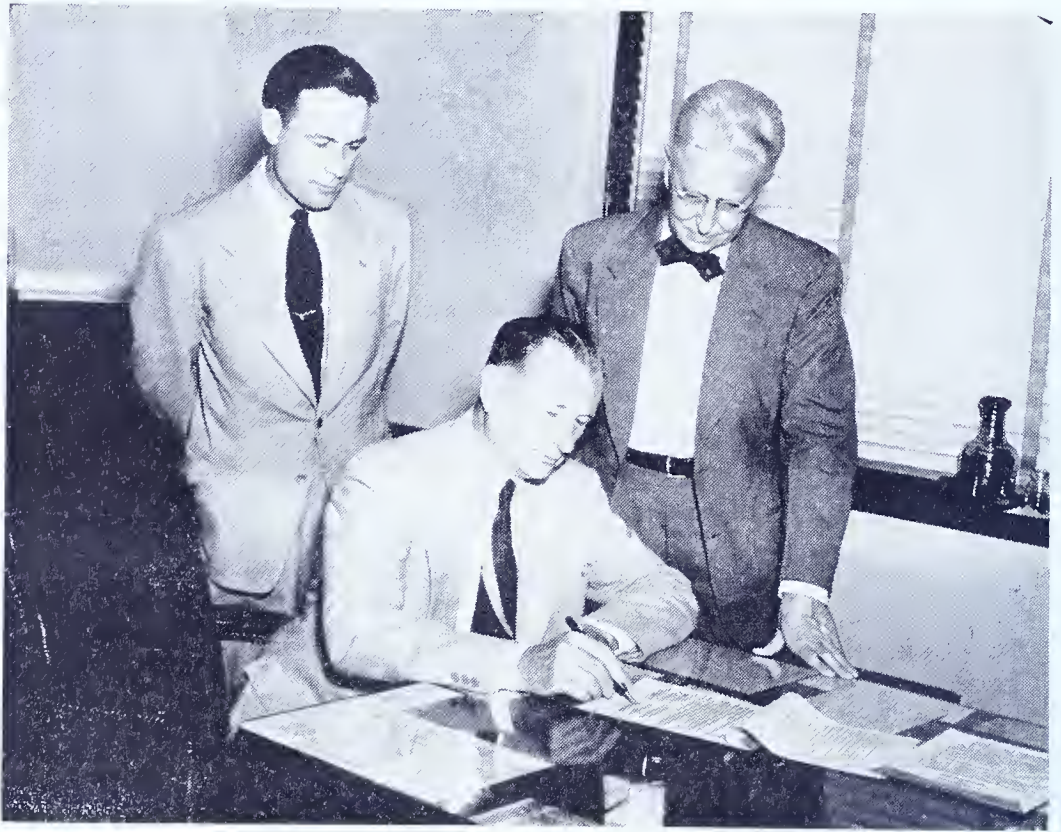
Executive Director Tom Frye of the Pennsylvania Game Commission and Supervisor Richard J. Costley of the Allegheny National Forest announced last month the signing of a State-Federal agreement for a joint wildlife management program designed to improve game conditions on the one-half million acre Allegheny National Forest in northwestern Pennsylvania.

The new agreement will increase by nearly 50% the amount of managed public hunting land in Pennsylvania. It will provide cooperative wildlife administration for a popular hunting area, already under heavy hunting pressure, known as the "Big Woods" to most sportsmen and embracing portions of Elk, Forest, McKean and Warren Counties. The program will place special emphasis on closer coordination between wildlife and forest management as a means for improving conditions in the two inter-related resources.

Signers of the agreement for the two agencies were President Ross L. Leffler of Pittsburgh for the Pennsylvania Game Commission and Regional Forester R. M. Evans of Philadelphia for the U. S. Forest Service.

Mr. Leffler explained that the agreement "provides for mutual planning and participation between State wildlife administrators and the U. S. Forest Service in specific improvement measures for game, including development of better food and cover, restocking, protection, predator control, census operations and emergency winter feeding." The new program, Mr. Leffler said, calls for the assignment of wildlife managers to perform their part of the work and to cooperate directly with land managers of the Forest Service in developing a more productive environment for game. Special practices, including food and cover planting, creation of open areas in the forest as wildlife feeding grounds, preservation of den trees and other measures in behalf of wildlife will be jointly planned and carried out by the

PENNSYLVANIA GAME COMMISSION AND U. S. FOREST SERVICE SIGN AGREEMENT FOR WILDLIFE MANAGEMENT ON ALLEGHENY NATIONAL FOREST



Executive Director Tom Frye signs the agreement on July 15th while Supervisor Richard J. Costley, Allegheny National Forest, left, and Regional Forester R. M. Evans, right, witness the signature.

cooperating agencies under a master plan. Forest officials will work with the Game Commission in developing timber management and forest harvesting plans designed to create and maintain a stable environment for sustained wildlife production. Director Frye and members of his staff met with officials of the U. S. Forest Service at Warren early in August to formulate preliminary plans on the ground.

The cooperative agreement represents a year or more of study, discussion and planning to assure its satisfactory adaptation to specific Pennsylvania conditions and problems. Representatives of both agencies have had a part in shaping the program and express confidence that it will definitely lead to better environmental conditions for game and to more efficient land and game management. Development work will be aimed at creating an all-purpose game area rather than one concentrating on big game production.

Fawn Deer Attends Conservation School

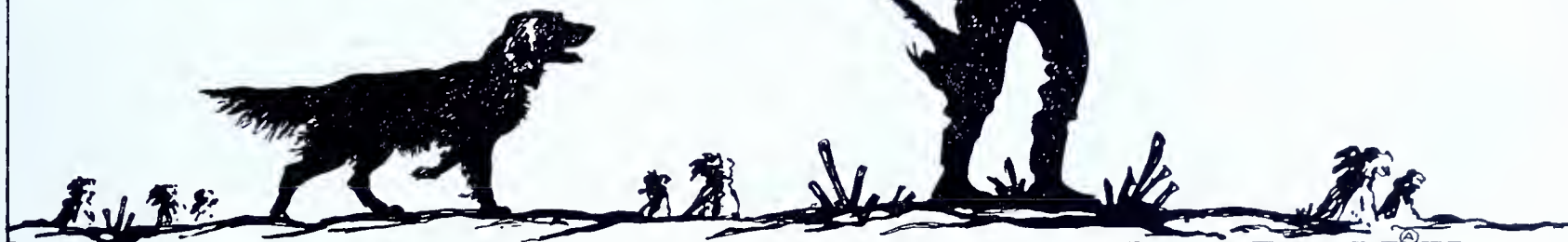
This summer, a fawn deer decided to become the school mascot at the Ross Leffler School of Conservation, where Pennsylvania Game Protectors are currently undergoing retraining.

The spotted little fellow makes himself at home on the school grounds and in the buildings. If a classroom door is left open during an instruction period, the fawn walks unconcernedly in and wanders about the aisles licking officers' hands and accepting ear scratching as a natural tribute to its cuteness.

When an instructor directs that the interference be removed so that he may get on with his subject, one of the Game Protectors lugs the dainty creature outside, where it stays until an opened door again suggests an opportunity for higher learning.



GUNS AND GUN DOGS



MORE ON BULLETS

By TED TRUEBLOOD

IN this column for May we discussed some of the qualities of the ideal big-game bullet. Several important points that were not taken up then because of space limitations will be considered here.

Possibly I should point out once more that the bullet is what kills the game. A beautiful rifle is nice, but you might as well hunt with a baseball bat if the bullet that comes out of that rifle's barrel doesn't do the job for which it was intended.

The ideal bullet is one that opens up adequately at long range, after it has shed a lot of its velocity, but doesn't go to pieces at short range when it still is hot (fast). Bullet designers have aimed at that goal for a long time, and such bullets as the Remington Core-Lokt, the Peters Inner Belted and the Western-Winchester Silvertip come close to achieving it.

The Western-Winchester ballistic engineers recently completed redesigning all the hunting bullets in their line. Such things as jacket thickness, change in jacket hardness resulting from various drawing operations, the amount of taper in jacket thickness from base to mouth, amount of exposure, shape of bullet, composition of core, special features to promote easy primary expansion and positive functioning at long range, bullet diameter, bearing length and location of knurl all were considered and juggled to give the proper result in each caliber.

Bullet shape has an effect on performance nearly as great as that of bullet construction. The W-W technicians discovered that the comparatively sharp pointed Silvertip bullet retains its velocity much better than the blunt-nosed soft point.

The 180-grain soft-point .30-06, as an example, has a 300-yard velocity of 1,900 feet per second, while the Silvertip in the same weight has a velocity of 1,860 at 400 yards. The corresponding energies are 1,445 and 1,385 foot pounds. Because the upset of both bullets is good at these respective ranges, killing power is extended practically 100 yards by the Silvertip in this cartridge.

The remaining velocity and energy at the ranges where game actually is shot are what count. Muzzle velocity and energy don't mean a thing when you hit a buck at 200 yards because every bullet begins to shed velocity the instant it leaves the muzzle of the rifle.

Many hunters, including some who should know better, have some very funny ideas along these lines. I have a friend who is a .300 Magnum enthusiast. He says my .270 is not big enough for elk. Yet he will shoot at, and says he has killed, elk at 300 yards with his .300.

The .300 Magnum 180-grain Silvertip bullet has 2,080 feet per second velocity and 1,730 foot pounds of energy remaining at 300 yards. The 130-grain .270 Silvertip has a velocity of 2,530 f.p.s. and energy of 1,850 foot pounds at 200 yards.

(Continued on Page 29)

BAD HABITS OF GUN DOGS

By HERBERT KENDRICK

A YOUNG DOG may be near perfection and, if the trainer relaxes his control of the new prospect, the dog may develop bad habits that will spoil the hunting for many seasons. When the alert trainer anticipates the early development of an undesirable trait, and successfully overcomes it while it is in the early stages of the dog's education, intelligent training will prevent him from acquiring serious faults and bad manners. Of all the faults a bird dog may possess, ninety-nine per cent of them may be corrected if an understanding trainer will apply corrective measures at the very beginning. There are cases that require great skill, long and drawn out efforts, and, unless the dog shows great promise it may be wiser to give him to someone as a pet, then get an unspoiled one and begin all over again!

The most serious of sins with which we are forced to contend are false pointing, bolting, blinking, and gun shying. This does not embrace all the faults a dog may have, not by any means. However, a large volume could be written on each of these subjects.

One of the greatest thrills in recreational sports is seeing a gun dog on a staunch point. However, that point can easily become very annoying and lose its beauty if it is unproductive. The dog that points staunchly on sparrows, butterflies, or without reason, can irritate the most patient gunner. The fault here may easily be overtraining. The handler has emphasized too much his "pointer" alone. When a dog has become a false pointer, the surest way to cure him is to completely ignore his points until you know he is *actually* on game. If it is a difficult case, start the dog's training all over again. Crowd him, whistle him out, speed him, even let him chase if he chooses. When his timid, over-cautious manner has changed to bold, definite hunting, teach him staunchness over again.

The desire to increase speed and range in dogs is perhaps the real cause of bolting, which means refusing to handle, or self-hunting out of range. The dog reasons that he may have a better time if he goes out on his own and forgets his handler, so very deliberately he does just that.

The cure for bolting is about the same as all other cures—get close to the dog and make a companion of him. Hunt in territory where game is plentiful, if possible, and show him clearly how great a part of the hunt he is. If the bolter is tough and headstrong and kindness plus discipline do not work, put a check cord on him, then lead him behind a reliable dog and permit him to back the point and observe the shooting.

The most worthless of all gun dogs is the gun shy animal. So important should be his love for the gun that he should be accustomed to its blast during his puppyhood. To cure this fault, first win the dog's confidence. Be absolutely sure he loves you and has no fear of you. Take him to the field as often as

(Continued on Page 29)



Millvale Sportsmen's Club

According to an announcement by C. H. Kenneweg, Secretary, the Millvale Sportsmen's Club recently "burned" the deed to their new farm which contains 98 acres. The land borders on State Game Lands 203 and the club is formulating plans for a pond on the property.

Octoraro Sportsmen's Club

Roscoe E. Steele was elected to head the Octoraro Sportsmen's Club during the present year at a meeting in April and the group has already staged two highly successful programs. A trap shoot in early April held at the club grounds at Mt. Olivet Church saw the Octoraro organization come out on top in a league shoot with Kenmore, Rising Sun, and Perryville. The following day the club staged a coon dog field trial in East Nottingham Township which drew 500 spectators for a field of 100 dogs. Proceeds from this field trial were to be used in the rebuilding of the club's pheasant pens. The organization now numbers 850 members with a goal of 1000 by the end of the year.

Rolfe Sportsmen's Club

The Rolfe Sportsmen's Club of Johnsonburg has just completed an extensive planting program in their dog training area located in the Little Mill Creek section of Elk County. The area consists of about 250 acres and after heavy stocking of cottontail rabbits during the past few years failed to show satisfactory results, the club decided on a large planting program. The organization also constructed winter feeders which were filled with corn and alfalfa during the cold season. It has also initiated a predator control program. Results of this intensive management have been very good with a steady increase in the cottontail population showing up. The club has also placed an order with a mid-western game farm for thirty dozen rabbits, half of the shipment to be stocked in the dog training area and the other half around Johnsonburg.

Erie County Sportsmen's League

According to a letter from H. P. Weinheimer, Vice-President, the Erie County

In Memorium



FRED E. WELLER, JR.

Death of Fred E. Weller, Jr., president of the Lackawanna County Federation of Sportsmen's Clubs, on June 26, was a loss to the cause of good sportsmanship, conservation and the promotion of better hunting and fishing. Under his able leadership the membership of the Federation grew to more than 3,000 and he always gave more than his share to keep the organization growing. He gained the respect of sportsmen and wildlife administrators alike and his untimely passing came as a shock to all.

Sportsmen's League is aiming at a membership roll of at least 4000 this year. For the past three years the League has spent an average of \$7000 annually on restocking programs and in late 1948 received two separate shipments of western rabbits totaling 3000 animals for release in the county. The club also held over for spring release 300 pheasants from 2500 successfully raised last summer through Pennsylvania's day-old chick program. Much of the fine progress made by the club in the past three years was due to the untiring efforts of Carlyle Brook, League president and noted big game hunter.

Prize Winning Entries in Forensic League Conservation Competitions Announced

Prize winning entries in a statewide series of poster, photographic, essay, and oration competitions dealing with wildlife in Pennsylvania and jointly sponsored by the Pennsylvania Forensic and Music League, and the Pennsylvania Game Commission were recently announced.

The Pennsylvania Forensic and Music League, sponsored by the Extension Division of the University of Pittsburgh, has sponsored high school competitions throughout the State since 1927 in various musical and other creative fields. This was the first year in which competitions were held which had wildlife conservation as a distinct theme.

There were five entrants in the photograph division which had as its theme, "Hunting With My Camera." All photographs were taken by the contestants and a fine shot of a bird at a nesting box won first place honors for Pat Mckenrick of Ebensburg Cambria High School. Second place honors were awarded to Edward Pritt, German Township High School, McClellandtown, for his candid study of a gray squirrel. Andrew McNeillie, Jr., New Bloomfield High School, Bloomfield, won third prize with his photograph of a blacksnake in the wild.

Entries in the poster contest on the theme, "Conserving Pennsylvania Wildlife," outnumbered those in other divisions two to one. The winning poster which is reproduced on the back cover of this issue of GAME NEWS was drawn by Brufene O. Thoman, Beaver Vocational School, Beaver and was a unanimous choice for the first prize honors by the judges. Second place honors were awarded to Sally Revie, Carlisle High School, while third place award was made to Jane Sunder of Greensburg High School.

Janet Huber of Lemasters High School won first place honors in the essay contest for her original manuscript, on wildlife conservation in Pennsylvania. Second prize honors were awarded to Jackie Funkhouser, Union Township High School, New Castle, while the third prize went to Ed Marburger, Jr., of Middleburg High School.

Five entrants in the original oration division were heard by the judges who awarded Lee Moran of Kingston Borough High School top place honors. He was followed by Philip Maronde, Union Township High School, New Castle for second prize and George Lobien, Mauch Chunk Borough High School, the third prize winner.

A \$50 Savings Bond went to all first prize entries while second place titlists were awarded a \$25 bond and third place winners \$10 in Saving Stamps. All prizes were sponsored by the Pennsylvania Game Commission. Judges of the photographic, poster, and essay divisions were Mr. Earle Poole, Director of the Reading Museum and well-known naturalist, and W. T. Johns, Editor of the PENNSYLVANIA GAME NEWS.

One evening just before dusk I witnessed two adult cottontails playing on the lawn of the Conservation School at Brockway. The singular fact was that the game was a modified form of Leap-frog played by children the world over. The rabbits crouched facing each other at a distance of about two to three feet, each eyeing the other like a gamecock. Suddenly one of the rabbits jumped into the air about six inches high. This seemed to be a sort of preparatory signal, for only a moment after alighting, the other jumped. As if propelled by the same force, bunny made a sudden lunge toward the jumper who would leap into the air, this time about twelve to eighteen inches high, to permit the lunging bunny to pass underneath. Then they squared off again and repeated the process after a few-second interval of sparring and nervous feinting. This went on for about two minutes, and then they "changed sides." The entire show lasted for about five or six minutes, after which the bunnies resumed their feeding activities.—John E. Harney, Assistant Leader, Pittman-Robertson Project 31-R.



Mr. Wegemer of St. Marys constructed two fairly large lily ponds on the edge of town. A heavily traveled road runs within ten feet of one edge of these ponds while shade trees surround the water on other sides. Mr. Wegemer called me on the 16th of May and told me a beaver had taken over one of the ponds. Furthermore, Bre'r Beaver was cutting down the trees along one bank. I told him it would be rather difficult to remove the beaver inasmuch as the ponds were without inlet or outlet and that I would probably have to shoot the beaver. He requested me to try to take it alive but not to shoot it unless as a last resort. Hundreds of people had come to watch the beaver swim about the pond and he was reluctant to having it shot unless it caused too much further damage. I took a live-trap and went to the pond about 8:30 in the evening to find a large crowd gathered to watch the show. The beaver was swimming about quite unconcerned and would dive and cavort as if it was acting to please the audience. I set the trap practically on dry land, baiting it with fresh aspen more to appease Mr. Wegemer than in any hope of catching the furbearer. Upon my return at 11:00 p. m. I checked the trap as a matter of course and, much to my surprise, found a sixty-pound beaver in the trap. There has been no further complaints.—Game Protector Vern A. Van Order, Wilcox.

On May 17th I investigated a rabbit damage complaint at the residence of Andrew Sivi of Youngsville. The investigation disclosed that the following trees and shrubs had been killed by rabbit girdling during

the winter: 30 tulip trees, 12 years of age; 17 tulip trees, 7 years of age; 175 Japanese rose bushes; 18 Trees of Heaven; 2 red-leaved prune trees; 2 English Hawthorne; and 2 Snowball bushes.—Game Protector Dave Titus, Warren.

While traveling along the road on State Game Lands #111 one morning in mid-May, I noticed a half grown rabbit jumping out of the weeds at the side of the road and a brown object clinging to its neck. I stopped the car to investigate but by the time the wheels stopped turning, a weasel was crossing the road with the rabbit. The tiny weasel could easily drag the larger bunny on the hard road but it was forced to slow up when it reached the weeds on the far side. This gave me a chance to load my pistol and approach the scene. However, the weasel saw me too soon, left the rabbit, and entered a brush pile nearby where it really played "Pop Goes the Weasel." It would run from one side to the other and stick its head out for only a second. This forced me to either shoot quickly or not at all. I missed three times. Finally, the weasel got brave enough to return to the rabbit which was lying within four feet of me. There, the "killer" stood its ground until I shot it. I believe this courageous little animal would have been hard to drive away from this fresh kill. An examination of the dead rabbit showed only a few marks on the side of the neck, thus indicating that the weasel never let go for a new hold. What surprised me was the quick job of killing as the whole affair lasted but a few minutes. This was a female weasel and I doubt whether they could do as much damage to a full-grown rabbit.—Andrew Ewart, Carmichaels.



1949 Pennsylvania Open Seasons For Waterfowl and Other Migratory Game Birds Under Federal and State Regulations

	Daily Limits	1949 Open Seasons (Sundays Excepted)	
		First Day	Last Day
Rails and Gallinules (except Sora), combined kinds	15	Sept. 1	Oct. 30
Sora	25	Sept. 1	Oct. 30
Coots	15	Oct. 21	Nov. 29
Wild Ducks, except American and Red-breasted Mergansers (See Exceptions)* ..	4*	Oct. 21	Nov. 29
American and Redbreasted Mergansers	25	Oct. 21	Nov. 29
Wild Geese	2	Oct. 21	Nov. 29
Woodcock	4	Oct. 10	Nov. 8
Doves	10	Oct. 10	Nov. 8

**Exceptions*—The regular daily duck limit of 4 shall not include more than one (1) Wood Duck. The daily bag must not contain more than two (2) Canada Geese, but may in addition include 3 Blue Geese. *Possession Limits* (after first day): Ducks, two days' bag, but only one (1) Wood Duck. American and Red-breasted Mergansers, no possession limit after first day. Woodcock, 8. Geese, and other migratory game birds, daily bag only. Possession 90 days after close of season where taken.

No Open Season—Wilson's Snipe (Jacksnipe), Snow Geese, Brant and Swans.

Shooting Hours (E.S.T.)—From beginning of respective open seasons to *October 31 inclusive*: Woodcock and doves, one-half hour before sunrise to sunset daily; waterfowl and coots, from one-half hour before sunrise to one hour *BEFORE* sunset, except that *the hour for commencement of season* for waterfowl and coots on first day is 12 o'clock Noon; November 1, 9 a.m. to one hour before sunset for waterfowl 5 p.m. for woodcock and doves; November 2 to end of respective seasons 7 a.m. to one hour before sunset for waterfowl, 5 p.m. for woodcock and doves; rails and gallinules, from opening date to October 20, inclusive, daily shooting hours one-half hour before sunrise to sunset. October 21 to October 30, inclusive, one-half hour before sunrise to one hour before sunset.

Exception: On the open waters of Lake Erie and the open tidal waters of the Delaware River lying within the Commonwealth from Trenton Falls to the Delaware State Line (not including inland tidal water), when shooting from boats or blinds at least 100 yards from shore or the shoreline of any peninsula or island within said Lake or River, the Federal one-half hour before sunrise to one hour before sunset regulation applies throughout the waterfowl season, except on November 1, when shooting before 9 a.m. is unlawful.

Migratory Bird Hunting Methods

Permitted: Shotgun only, not larger than 10-gauge, fired from shoulder (including hand-operated repeating shotgun of not more than 3-shell capacity, which must be plugged to 3 shots so that plug cannot be removed without disassembling the gun); bow and arrow; dog; blind; boat propelled by hand; floating device other than sinkbox; artificial waterfowl decoys. Injured or dead waterfowl may be picked up by means of a motorboat, sailboat or other craft.

Prohibited: Automatic shotgun; hand-operated repeating shotgun of more than 3-shell capacity in magazine and chamber combined; all rifles; live duck or goose decoys; automobile; aircraft; sinkbox (battery); power boat, sailboat, or any device towed by power boat or sailboat; the placing or distributing in any manner of corn, wheat, oats, or other grain or product thereof, salt, or any kind of food, whereby migratory game birds are attracted or lured; and taking of waterfowl by use of cattle, horses or mules. No motor-driven land, water or air conveyance or sailboat may be used to concentrate, drive, rally or stir up waterfowl or coots.

Federal Stamp for Migratory Bird Hunting

It is unlawful for a person over the age of 16 years to take migratory waterfowl unless he carries on his person an unexpired Federal migratory bird-hunting stamp, validated by his signature written in ink across its face. Not valid after June 30 following date of issue. This stamp is not required to hunt Doves, Woodcock, Rails and Gallinules.

A HUNTING KNIFE—from Page 7

discs can be crowded on the tang and sometimes the blade insists on crawling out of the hilt as you tighten the vise. In this case just swat it gently with a wooden mallet and drive it back where it belongs. If this doesn't help, grasp the blade with a pair of husky pliers and strike the pliers with a hammer. A piece of thin leather under the plier jaws will protect the finish of the blade. With all discs in place and the blade driven tightly against the guard facing keep the vise drawn up and the hilt compressed until the cement is dry.

In the meantime roughly fashion a pommel from a chunk of deer antler. In this piece drill a 7/32 inch hold 5/8 inch deep and pierce it from side to side with a very small hole about 5/16 inch from the face.

When the hilt is dry remove it from the vise and slip the pommel over the tang. Insert the drill in the small hole and mark the tang to show its exact location with the pommel in place. Then remove the pommel and with a center punch place an indentation on the tang about 1/64 inch in front of the drill mark. Drill a small hole through the tang at this spot. Select a suitable nail and smooth off its point. After coating the face of the pommel with cement slip it on the tang and secure it by driving the nail through the hole. The off-center hole in the tang will draw the two pieces together firmly. Cut off the ends of the nail and the pommel is permanently attached.

When the last of the cement is dry the hilt is trimmed to shape. The leather can be carved with a sharp knife but the other material must be shaped on the grinder. Finish the shaping with a file, then smooth the entire hilt with several grades of sand paper. Two coats of spar varnish will bring out the rich colors of the various parts of the hilt and you'll say, "Man alive, you just can't buy a knife like that!" I hope that's good.

All you need now is a sheath in which to tote your precious knife—one that's sturdy enough to keep the point out of your equally precious hide. One type made of heavy, bark tanned leather is shown in fig. 1. The leather is cut 7/16 inch wider than the blade all around, and the stitching is 3/16 inch from the edge of the leather. Join the two pieces together with the stitch illustrated in fig. 7, using two needles. Draw your stitches as tight as possible and fasten the ends by reversing the direction and sewing back over the last four or five stitches. The holes are punched with an

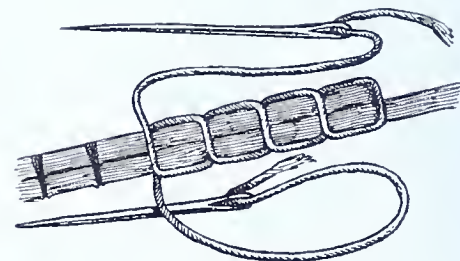


fig. 7—Cutaway view of stitching.

"JOE BEAVER"

By Ed Nofziger



"Your lease on this tree runs for thirty years. That's the best I can do for you."

ordinary awl. If the leather you are using is rather stiff and hard soak it for a short time in water. This will soften it enough to allow the stitches to be pulled into the leather somewhat, giving the sheath a much neater appearance. Have your local shoemaker put a strong snap on the keeper strap and attach this to the sheath with a rivet. Then, as a precaution against the blade cutting the threads insert six small split rivets as shown.

Your knife is now ready for its first hunting trip. With the application of a reasonable amount of common sense it will last for years. Always keep it sharp; a knife that won't cut is as useless as air-brakes on a turtle. Use it only for the purposes for which knives are intended—not as a screw driver, a can opener or a tack hammer. Keep it clean and free of rust. Use it with caution; one slip of a sharp knife can result in someone getting badly sliced. Last of all, don't wear it over your groin where it can stab you when climbing or kneeling; hang it over your hip pocket and you'll probably live to enjoy its beauty and usefulness for a long, long time.

Official 1949 Open Seasons and Bag Limits for Pennsylvania

(See separate summary for Waterfowl and other Migratory Game Birds)

Open season includes all dates listed, Sundays excepted for game. On November 1 no hunting of any kind before 9 a. m. Except November 1, shooting hours daily are 7 a. m. to 5 p. m., but from July 1 to September 30 inclusive, 6 a. m. to 7:30 p. m. (All shooting hours based on Eastern Standard Time.)

UPLAND GAME (Small Game possession limit two days' bag)	Bag Limits		Open Seasons		
	Day	Season	First	Day	Last Day
Quail, Bobwhite	4	12	Nov. 1	Nov. 12	
Hungarian Partridges	2	8	Nov. 1	Nov. 12	
Ruffed Grouse (Open 6 days only)	2	6	Nov. 1, 2, 3,	10, 11 & 12	
Wild Turkeys (See counties closed and those with restricted season below)*	1	1	Nov. 1	Nov. 26	
Ringneck Pheasants, males only	2	8	Nov. 1	Nov. 26	
Rabbits, Cottontail	4	20	Nov. 1	Nov. 26	
Squirrels, Gray, Black & Fox (combined kinds) ..	4	20	Nov. 1	Nov. 26	
Squirrels, Red (Closed October only)	Unlimited		Nov. 1	Sept. 30,	1950
Hares (Snowshoe Rabbits)	2	6	Dec. 19	Jan. 2,	1950
Raccoons, by individual or hunting party*	5	} 35	Nov. 1	Feb. 1,	1950
Raccoons, by trapping*			Nov. 10	Feb. 1,	1950
Woodchucks (Groundhogs), both 1949 & 1950	5	Unlimited	July 1	Sept. 30	
Grackles (Protected October only)	Unprotected		from Nov. 1 to	Sept. 30,	1950
Bears, over one year old, by individual	1	1	Nov. 14	Nov. 19	
Bears, as above, by hunting party of three or more	2	2	Nov. 14	Nov. 19	
Deer, male with two or more points to one antler, by individual	1	1	Nov. 28	Dec. 9	
Deer, Antlerless (See note)* by individual			Dec. 10 only		
Deer, as above, by hunting party of six or more (Antlered and Antlerless combined)	6	6	Deer-hunting dates above		
NO OPEN SEASON—Hen Pheasants, Cub Bears and Elk.					
FURBEARERS—(See notes under Special Regulations)*					
Skunks	Unlimited		Nov. 10	Feb. 1,	1950
Minks and Otters	Unlimited		Nov. 10	Dec. 10,	1949
Muskrats (By traps only)*	Unlimited		Jan. 1	Feb. 1,	1950
Beavers (Traps only, 8 counties closed)*	2	2	Feb. 15	Mar. 1,	1950
Opossums (Closed October only)	Unlimited		Open all months except Oct.		

*SPECIAL REGULATIONS

Turkeys, Counties Closed—Adams, Bradford, that part of Cambria south of Conemaugh River, Carbon, Clarion, Columbia, that part of Cumberland south of U. S. Highway Route No. 11 to the west shore of the Susquehanna River, Fayette, Forest, that part of Franklin south of U. S. Highway Route No. 11, Greene, Lackawanna, Luzerne, Monroe, Northampton, Pike, Schuylkill, that part of Somerset north of the Pennsylvania Turnpike, Susquehanna, Venango, Warren, Wayne, Westmoreland, Wyoming and York.

Turkeys, Restricted Season—Cameron, Clearfield, Clinton, Elk, Jefferson, Lycoming, McKean, Potter, Snyder, Sullivan, Tioga and Union, NOV. 1 TO NOV. 12 ONLY, INCL.

Raccoons—Hunting season begins at 9 a. m. on first day, and ends at noon on last day (See instructions below concerning trapping). May be hunted day or night, Sundays excepted. The season limit applies to hunting and trapping combined.

Antlerless Deer Season, Statewide, One Day Only—May be taken December 10, without special permits. A person may kill only one deer (either a legal antlered or an antlerless deer—not both) during the 1949 season. The regular camp limit applies to the combined seasons and sexes. Season may be closed in any county under Act 221 of 1949. (Newspapers will announce closed counties, if any.)

Beavers, Counties Closed—Allegheny, Beaver, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland. No trapping at Commission-posted dams. **Nonresidents may not trap beavers.** One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to Protector in District or County where trapped.

Trapping—Traps shall not be placed, staked, or set before 7 a. m. on the first day of the open seasons for furbearers and raccoons. Trapping closes at 12 o'clock noon on last day. Traps must be tagged with metal name tags.

Snares—Without springpoles for taking predators from December 16 to March 31, 1950, legal only in Clarion, Crawford, Forest and Warren Counties.

(FIXED BY PENNSYLVANIA GAME COMMISSION AT MEETING JULY 1, 1949)
1949 HUNTING LICENSE IS VALID SEPTEMBER 1, 1949 TO AUGUST 31, 1950,
BOTH DATES INCLUSIVE

MORE ON BULLETS—from Page 25

Therefore, the .270 is more gun at 200 yards than the .300 Magnum is at 300. The 130-grain .270 bullet and the 180-grain Silver-tip .30-06 have the same energy at 200 yards, 1,850 foot pounds. This is in excess of half a ton more energy than the .300 Magnum has at 300.

Now, of course, if you were going to shoot a buck at 100 yards with all three rifles, the Magnum would hit his harder. But when you begin to stretch that range your bullet sheds velocity and with it the energy that makes clean kills. If you consider the Magnum a 400-yard rifle—and a lot of the boys do—you want to remember that you're not hitting with a Magnum wallop at that range. You're hitting with a .30-30 wallop.

Here is another amusing thing. Most .30-06 users laugh at the .30-30 boys. The average hunter using a .30-06 will try a shot at 300 yards. At that range the big gun has about the same striking force that the .30-30 has at 100—1,445 foot pounds energy for the 180-grain 06 compared to 1,405 for the 170-grain .30-30.

Thus, in results obtained, the .300 Magnum has less than 100 yards margin over the .270 and .30-06. The 06 has about 200 yards over the .30-30.

BAD HABITS OF GUN DOGS—from Page 25

possible and work him on birds. Do not take a gun for a long time. Follow this procedure for several months if the weakness is severe. When you feel that the dog is thoroughly enjoying the field trips, take along a small bore gun and wait until the dog is staunch on point. Do not shoot on the covey rise, but let him seek the singles. When a positive point is made, flush the bird and don't miss! The chances are good that he will be intense enough on point that he will scarcely hear the report of the gun. Allow that one shot to do for the day. Go afield often and increase the shooting as he becomes quieter. The dog only has to know that noise is nothing to fear and that actually the shooting contributes to the fun. Curing the gun shy dog requires great patience and skill, but it can be done!

All these bad habits can be avoided if the trainer anticipates them and continually guards against them. Just remember that the superlative performer is always worth the time and trouble to teach him properly and hunt him intelligently.

GAME LAW VIOLATIONS

(All persons listed by county of residence; regardless of county in which violation occurred).

Cases Settled During the Month of February, 1949

ADDITIONAL CASES NOT PREVIOUSLY REPORTED

BUTLER—\$125		
Stalker, Homer B., R. D. 1, Boyers. Possessing deer unlawfully taken	\$100.00	
Wilde, Martin L., Portersville. Attempting to defraud Commonwealth through collection of bounty	25.00	
CLARION—\$100		
Anthony, Leonard M., Curlsville. Assisted in killing a deer in closed season	100.00	
ERIE—\$40		
Allen, Richard G., 854 Priestly Ave., Lawrence Park, Erie. Failure to pick up three traps at close of muskrat season	30.00	
Hare, Albert D., Waterford. Failure to pick up muskrat trap at close of season	10.00	
LAWRENCE—\$40		
Torner, Clinton B., R. D. 2, Portersville. Giving false dates to secure bounty on 2 gray fox and 1 weasel	30.00	
also, failure to tag one trap	10.00	
MERCER—\$230		
Garrett, James L., R. D. 2, New Wilmington. Making false date of killing one weasel	10.00	
Slater, Harland E., R. D. 1, Stoneboro. Failure to produce the head of a deer upon the demand of an officer	100.00	
Slater, James E., R. D. 1, Stoneboro. Failure to produce the head of a deer upon the demand of an officer	100.00	
Walker, Ronald C., R. D. 2, Hubbard. Failure to tag two traps	20.00	
VENANGO—\$35		
Rogers, James A., R. D. 4, Oil City. Attempting to collect bounty by giving false date	10.00	
Russell, John A., R. D. 1, Oil City. Dog chasing deer	25.00	
WARREN—\$30		
Carlson, Donald E., 7 Hinkle St., Warren. Failure to visit traps within 36 hours	10.00	
Muczynski, Benny P., 810 N. Main St., Youngsville. Falsifying dates in the killing of two weasels in attempt to collect bounty	20.00	
NON-RESIDENT—\$20		
Eggleston, Earnest M., R. D. 1, N. Clymer, N. Y. Attempting to take muskrats in closed season	10.00	
Lindberg, David A., Panama, N. Y. Attempting to take muskrats in closed season	10.00	

Cases Settled During the Month of March, 1949

ADDITIONAL CASES NOT PREVIOUSLY REPORTED

ALLEGHENY—\$25		
Conley, John F., 623 10th St., Pitcairn. Possessing loaded rifle in vehicle in motion on highway	25.00	
BUTLER—\$35		
Bungar, William, R. D. 5, Butler. Giving false affidavit to collect bounty	10.00	
McGinty, Jessie, Branchton. Dumping garbage on State Game Lands	25.00	
CRAWFORD—\$10		
Wagner, Glenn, R. D. 4, Cochranon. False sale on weasel	10.00	
CLARION—\$145		
Blauser, Pershing W., Parkersland. Making false dates on 2 fox to collect bounty	20.00	
Clutter, William D., Curlsville. Killing a deer in closed season	100.00	
Courtney, Truman T., R. D. 2, Knox. Loaded rifle in vehicle in motion	25.00	
ERIE—\$45		
Carbaugh, Eben, R. D. 3, Corry. Making false claim for bounty by presenting weasel killed by another	25.00	
also, Giving false date in attempt to collect bounty on one weasel	10.00	
Surovic, Henry J., R. D. 2, Waterford. Giving false date in attempt to collect bounty on one weasel	10.00	
MERCER—\$65		
Carlson, William, 447 Liberty St., Grove City. Taking one muskrat in closed season	10.00	
Kamerer, Jack W., R. D. 2, Jackson Center. Dog chasing game not under control of owner	10.00	
Nehus, August, R. D. 1, Sacksan. False date on weasel	10.00	
Roman, Richard, R. D. 2, W. Middlesex. False date on gray fox	10.00	
Slater, William G., R. D. 1, Stoneboro. Attempting to collect bounty for fox by deception	25.00	
VENANGO—\$10		
Heeter, James D., Nickelville. Attempting to collect bounty on red fox by giving false date	10.00	
Watson, James T., R. D. 1, Emlenton. Killing two gray squirrels in closed season	25 days	
WESTMORELAND—\$250		
Mathias, Robert, 1st St. Ext., Trafford. Possessing parts of two deer and possessing two ringneck pheasants in closed season	250.00	
NON-RESIDENT—\$60		
Mortos, Richard C., 27 Forest Ave., Jamestown, N. Y. Trapping without non-resident license; Givin wrong date on one red fox to secure bounty	60.00	

Cases Settled During the Month of April, 1949

ADDITIONAL CASES NOT PREVIOUSLY REPORTED

BUTLER—\$165		
Brandt, Ray W., R. D. 1, Mars. Attempt to kill ringneck in closed season	25.00	
Hoover, Martin V., 719 Franklin St., Slippery Rock. Failure to show license on demand	20.00	
Klingensmith, Gertrude A., R. D. 2, Evans City. Dog chasing—killing rabbit in closed season	15.00	
McConnell, Mervin H., 352 Franklin St., Slippery Rock. Assisting to conceal game unlawfully taken	10.00	
Skelley, Howard J., R. D. 7, Butler. Raising fur bearing animals for commercial purposes without a permit	25.00	
Sheperd, Chas. C., R. D. 1, Zelienople. Dog chasing small game in closed season	10.00	
Topley, James B., 333 Sout St., Slippery Rock. Using motor vehicle to transport game unlawfully taken	50.00	
Vensel, William A., R. D. 1, Chicora. Giving false date to collect bounty	10.00	
CLARION—\$75		
Beary, Virgil R., R. D. 2, Shippenville. Dog chasing deer	25.00	
Gross, Harland E., Strattonville. Dog chasing deer	25.00	
Lowors, Clemens E., R. D. Parkersland. Making false affidavit to collect bounty on weasel	25.00	
CRAWFORD—\$110		
Free, Milby S., R. D. 3, Cochranon. False affidavit on one fox and one weasel	50.00	
Gibson, Wm. D., R. D. 2, Springboro. Dumping refuse and litter on State Game Lands	25.00	
Reese, Paul S., R. D. 1, Atlantic. Dog chasing game in closed season	10.00	
Wood, Merle W., R. D. 1, Geneva. Making false affidavit to secure bounty on one gray fox	25.00	
ERIE—\$10		
Miles, Ronald E., 122 E. Wayne St., Corry. Killing protected bird	10.00	
MERCER—\$35		
Kline, Richard D., Carlton. False affidavit on one fox	25.00	
Leventry, Warren C., R. D. 3, Greenville. Killing rabbit in closed season	10.00	
WARREN—\$50		
Hawson, William E., 671 Beech St., Warren. Assisting in attempt to collect bounty on red fox through deception	25.00	
Hawson, John C., 669 Beech St., Warren. Making false affidavit to secure bounty on red fox	25.00	

Cases Settled During the Month of May, 1949

ADDITIONAL CASES NOT PREVIOUSLY REPORTED

BUTLER—\$35		
Campbell, Ralph M., R. D. 2, Sunburg. Dog chasing and killing rabbits in closed season	15.00	
Mahood, John A., Eau Claire. Giving false date to secure bounty	20.00	
BEAVER—\$10		
Brown, Robert A., Rochester. Possessing ground hog in closed season	10.00	
CLARION—\$25		
Black, John, Shippenville. Dog running on Game Refuge	25.00	
CRAWFORD—\$35		
Alexatos, Lewis, 175½ Chestnut St., Meadville. Running roadside menagerie without a permit	25.00	
Tingley, LeRoy, Geneva. Hunting woodchuck in closed season	10.00	
ERIE—\$45		
Cummings, Leslie, 312 Smith St., Corry. Attempting to kill woodchuck in closed season	10.00	
Evans, Wayne, 10 Spring St., Corry. Loaded rifle in vehicle standing	10.00	
Relcitt, Alfred, R. D. 3, Union City. Killing pheasant in closed season	25.00	
LAWRENCE—\$135		
Garver, Jerry S., 928 Hazel Ave., New Castle. Possessing a deer or parts of a deer illegally taken	100.00	
Sheen, Ralph, 208 Green St., New Castle. Possessing one raccoon illegally taken in closed season	25.00	

Smith, Clair, 916 Dewey Ave., New Castle. Illegal possession of one barn owl	10.00
VENANGO—\$200	
Hynes, Robert H., 81 Grove Ave., Oil City. Hunting deer in closed season	100.00
Wurster, Junior, N.S.S.R., Oil City. Hunting deer in closed season	100.00

WARREN—\$60	
Murphy, Dennis P., Irvine. Failure to display license while hunting	20.00
and killing one woodcock in closed season	10.00
Murphy, Charles E., North East. Failure to display license while hunting; Killing one woodchuck in closed season	30.00

Cases Settled During the Month of June, 1949

ALLEGHENY—\$240	
Balisky, Harry Jr., 4 Cole Crest St., Carnegie. Training a dog in closed season	10.00
Boyer, Samuel Fremont, Library. Dog chasing game in closed season	10.00
Bricker, Harry, 3144 Miles Road, N. S. Pittsburgh. Digging and removing tree from State Game Lands	25.00
Carleo, Steve, 7 Franklin St., Carnegie. Dog chasing game during closed season	10.00
Dean, Albert Chalfant, 621 S. Ave., Wilkinsburg. Mounting protected bird without a permit	25.00
Decker, John Ronald, 618 Tingley Ave., Pittsburgh 2. Possessing protected bird	10.00
Geiger, Theodore Joseph, 1101 Lapish Road, N. S. Pitt. Digging and removing tree on State Game Lands	25.00
McMillan, Clifford, R. D. No. 1, Baden. Dumping rubbish on State Game Lands	25.00
Michael, Harry Lee, R. D. No. 3, Elizabeth. Dog chasing game in closed season	10.00
Rose, Wilbur James, 1309 N. Ave., Wilkinsburg. Killing protected bird	10.00
Schmiedlin, Daisy Mildred, 747 Glenside St., Pitt. 14. Mounting protected bird without permit	25.00
Sopcak, Joseph, Box 191, Unity. Failure to show license tag while hunting	20.00
Stevanus, Victor Roy, 1512 Maple Ave., Turtle Creek. Mounting protected bird without permit	25.00
Woods, Henry Lee, Box 101, Wireton. Making false affidavit to collect bounty on one fox	10.00
ARMSTRONG—\$30	
Toy, Hadley, R. D. No. 4, Kittanning. Hunting without resident license; attempting to kill a woodchuck in closed season	30.00
BEAVER—\$50	
Brown, Kenneth Leroy, R. D. No. 3, Beaver Falls. Dog chasing deer	25.00
Flook, Luther, 281 Marshall Alley, Ambridge. Dumping rubbish on State Game Lands	25.00
BEDFORD—\$10	
Williams, Evans, Saxton. Making false declaration of date of killing one red fox	10.00
BERKS—\$10	
Angstradt, Oscar Ralph, R. D. No. 1, Mertztown. Hunting game in closed season	10.00
BLAIR—\$45	
Gibson, Adie Bell, R. D. No. 1, Altoona. Training dog in closed season	10.00
Harris, Harold, R. D. No. 2, Altoona. Attempting to take woodchuck in close season	10.00
Kuhn, David Wayne, 1312 21st Ave., Altoona. Hunting game on Sunday	25.00
BRADFORD—\$150	
Johnson, Francis, R. D. No. 6, Towanda. Setting three traps for beaver, within 25 feet of beaver dam	150.00
CAMBRIA—\$50	
Bracken, George LeRoy, Box 337, Twin Rocks. Hunting woodchucks in closed season	10.00
Cashman, Kenneth Harlos, 148 Cooper Ave., Johnstown. Attempting to take groundhog in closed season	10.00
Gates, Joseph John, 24 McCoy St., Nanty Glo. Training dog in closed season	10.00
Ohlmacher, Dr. Joseph P., 725 Wayne St., Johnstown. Killing rabbit in closed season	10.00
Waldron, Russell William, 1076 1st St., Nanty Glo. Killing woodchuck in closed season	10.00
CAMERON—\$125	
Bell, Arthur, Gen'l Del. Emporium. Fishing in State Game Refuge	25.00
Verbeck, Sr., Jas. Frank, Box 87, Sinnamahoning. Killing deer to protect property with firearm discharging more than a single ball (No. 6 shot)	100.00
CENTRE—\$45	
Butlin, John Irwin, Gen'l Del., Philipsburg. Killing wild duck in closed season	10.00
Peters, John Lester, Blanchar. Possessing rifle in vehicle along highway	25.00
Weaver, Warner Lawrence, R. D. No. 1, Port Matilda. Making false statement in claim for bounty	10.00
CHESTER—\$20	
Wilson, Jr. John Gilmore, R. D. No. 1, Morehall Rd., Malvern. Failure to display license tag while hunting	20.00
CLARION—\$35	
Clutter, Wm. D. Curlsville. Possessing rifle in vehicle along highway; Hunting woodchuck in closed season	35.00
CLEARFIELD—\$110	
Berry, James, Kylertown. Aiding and assisting in attempting to kill a deer by use of artificial light	100.00
Condon, Victor A., 703 S. 3rd St., Clearfield. Possessing rifle not securely wrapped between 5 P. M. and 7 A. M.	10.00
CRAWFORD—\$20	
Emerson, Charles, R. D. No. 3, Titusville. Hunting without resident license	20.00
ELK—\$220	
Jordon, Louis Henry, 112 Grove St., Johnsonburg. Possessing rifle in vehicle along highway	10.00
Nicklas, Jerome Martin, 562 Chestnut St., St. Marys. Throwing artificial light on deer while possessing firearm; Attempting to kill turkey in closed season	125.00
Nicklas, Lawrence John, 618 Center St., St. Marys. Attempting to kill a wild turkey in closed season	25.00
Nicklas, Paul Jerome, 562 Chestnut St., St. Marys. Attempting to kill turkey in closed season	25.00

Schatz Jr., Louis A., 237 Market St., St. Marys. Fishing in State Game Refuge	25.00
Warmbrodt, Edward, Box 162, Johnsonburg. Possessing rifle in vehicle standing along highway	10.00
ERIE—\$65	
Bertges, Charles F., R. D. No. 1, Wattsburg. Making false affidavit to collect bounty on 3 red foxes	30.00
Brown, Eugene R., R. D. No. 3, Waterford. Possessing rifle in vehicle standing along highway	10.00
King, Glenn R., Range Road, R. D. No. 2, Union City. Possessing live raccoon without permit	25.00
FAYETTE—\$160	
Fowler, Charles William, R. D. No. 1, Smithfield. Possessing a raccoon in closed season	25.00
Schreckengost, Ottie Lloyd, Box No. 411, Fairchance. Training dog in closed season	10.00
Shipley, Harry R., Ohiopyle. Failure to produce head of deer upon demand of officer	100.00
Victor, Ernest Merle, 18 Rist Street, Uniontown. Dumping rubbish on State Game Lands	25.00
FRANKLIN—\$60	
Angle, Edward Paul, 685 Broad St., Chambersburg. Possessing rifle in vehicle standing along highway; Hunting without license tag properly displayed; Aiding and assisting in concealment of game	40.00
Eyer, Garnet Arthur, 741 Broad St., Chambersburg. Aiding and assisting in the concealment of game	10.00
Smith, Clyde Rodney Sr., Rt. 5, Chambersburg. Dog chasing game in closed season	10.00
FULTON—\$75	
DeShong, Martin Theoplis, Harrisonville. Making false affidavit to collect bounty on 3 red foxes	75.00
GREENE—\$25	
Wise, Andrew Stephen, R. D. No. 2, Sycamore. Possessing live raccoon without permit	25.00
HUNTINGDON—\$10	
Bumgardner, George H. Orbisonia. Falsifying date of the killing of 1 gray fox in attempt to collect bounty	10.00
INDIANA—\$270	
Best, Charles Stewart, Smicksburg. Hunting woodchucks in closed season	10.00
Lively, William Fred, R. D. No. 1, Box 7, Blairsville. Possessing raccoon in closed season	25.00
Nichol, Ralph Beryl, R. D. No. 2, Marion Center. Shooting and attempting to kill a wild turkey in closed season	25.00
Robinson, Lloyd Stanley, Indiana St., Saltsburg. Training dog while carrying firearm raised and fired from shoulder	10.00
Spencer, Glenn Dale, R. D. No. 1, Rossiter. Possessing parts of deer in closed season	100.00
Spencer, Joseph Lorenzo, R. D. No. 1, Rossiter. Possessing parts of deer in closed season	100.00
LACKAWANNA—\$30	
Bishop, Roy William, 436 High St., Winton. Attempting to kill woodchuck from automobile	20.00
Dennis, George Avery, R. D. No. 2, Avoca. Dog chasing game in closed season	10.00
LAWRENCE—\$25	
Swesey, Paul D., Box 463, Ellwood City. Killing raccoon in closed season	25.00
LEHIGH—\$35	
Ochs, Kenneth John, 1036 N. 20th St., Allentown. Possessing rifle in vehicle along highway	10.00
Stewart, Harry William, R. D. No. 1, Coplay. Using a boat while fishing on Brady's Lake before July 1	25.00
LUZERNE—\$135	
Bentley, George Edward, Kirkeneall Ave., Shavertown. Using a boat to fish on Brady's Lake before July 1	25.00
Gittins, Bert Edmund, R. D. No. 3, Wyoming. Using a boat to fish on Brady's Lake before July 1	25.00
Kernag, Joseph George, R. D. No. 1, Hunlock. Disposing of game without propagating permit	25.00
Kinney, Frank, 54 Main St., Sugar Notch. Dog chasing small game in closed season	10.00
Major, Albert Dewey, School St., Shavertown. Using a boat to fish on Brady's Lake before July 1	25.00
Rozitski, Joseph John, 24 Preston St., Ashley. Using a boat to fish on Brady's Lake before July 1	25.00
LYCOMING—\$75	
Hamm, Ernest V., 720 Walnut St., Williamsport. Depositing rubbish on State Game Lands	25.00
Sweet, Lawrence William, 1631 Taylor Place, Williamsport. Entering State Game Propagation Area	25.00
Thomas, Harry Elery, 109 Parkwood St., Williamsport. Entering State Game Propagation Area	25.00
McKEAN—\$210	
Carrow, Richard Perry, Hazellhurst. Possessing two beaver skins unlawfully taken	100.00
Chiodo, Frank, 171 W. Washington St., Bradford. Possessing parts of a deer in closed season	100.00
Holden, Earl Collins, Cyclone, Box 82. Attempting to collect bounty by deception	10.00
MERCER—\$60	
Baker, Richard, 97 Canal St., Greenville. Possessing rifle in vehicle in motion along highway	25.00
Freni, Richard, R. D., Sandy Lake. Making false affidavit to collect bounty on one red fox	10.00
Thomas, Charles, 97 Canal St., Greenville. Possessing loaded rifle in vehicle in motion on highway	25.00
MONROE—\$100	
Hanna, Silas Robert, Saylorsburg. Killing one deer in closed season	100.00

MONTGOMERY—\$55

Lazowicki, Richard, R. D. No. 1, Perkiomenville. Entering State Game Lands with fire arms in closed season	25.00
Walton, Mrs. Mary, 624 Lincoln Ave., Pottstown. Dog chasing small game in closed season	10.00
Weinsteiger, Lawrence Edwin, R. D. No. 4, Pottstown. Hunting woodchucks in closed season	10.00
Weinsteiger, William Richard, R. D. No. 4, Pottstown. Hunting woodchucks in closed season	10.00

PERRY—\$10

Weller, Stanley Oliver, Loysville. Possessing one woodchuck in closed season	10.00
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PHILADELPHIA—\$90

Jackson, George William, 3058 S. 84th St., Philadelphia. Trapping while trapping rights have been denied; Securing hunter's license while hunting rights have been denied	80.00
Mitchell, Lesley, 2213 League St., Phila. Killing game in closed season	10.00

POTTER—\$225

Ferrier, John Harvey, R. D. No. 2, Genesee. Attempting to kill a deer in closed season	100.00
Glassmire, Walter Nathan, R. D. No. 2, Coudersport. Transporting parts of deer in closed season; Possessing rifle in vehicle on highway	125.00

SOMERSET—\$60

Blair, Kenneth Donald, Boswell. Attempting to take a groundhog in closed season	10.00
Brenneman, Ernest Robert, Jerome. Permitting dog to chase game in closed season	10.00
Curo, Joseph John, Jerome. Permitting dog to chase game in closed season	10.00
Platt, Charles Edward Jr., Shanksville. Killing two (2) groundhogs in closed season	20.00
Saylor, Joseph Miller, 5th Ave., Berlin. Hunting groundhogs in closed season	10.00

TIOGA—\$120

Dibble, Glenn Tinsley, R. D. No. 1, Westfield. Making false affidavit of dates of killing two red foxes to collect bounty	20.00
Pequignot, Romain Delos, Liberty. Possessing parts of deer in closed season	100.00

VENANGO—\$35

Boriand, Robert, 110 Main St., Oil City. Possessing rifle in vehicle in motion along highway	25.00
Smith, Thomas S., 211 15th St., Franklin. Killing protected	

bird—cedar waxwing	10.00
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WARREN—\$100

Trumbull, Merle A., 203 Division St., Warren. Possessing parts of deer taken in closed season	100.00
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WASHINGTON—\$170

Barnes, Richard David, Box 23, Venetia. Dog chasing small game in closed season	10.00
DeLuca, Angelo Joseph, R. D. No. 3, Burgettstown. Dumping rubbish on State Game Lands	25.00
Dziak, Thomas Albert, Cokeburg. Killing hen pheasant	25.00
Niccolai, Amedeo John, Dun'evy. Killing mink in closed season ..	10.00
Pelton, George John, R. D. No. 1, Charleroi. Possessing live raccoon without permit	25.00
Robinson, Robert Shipley, 55 N. Main St., Burgettstown. Dumping rubbish on State Game Lands	25.00
Taucher, Frank Louis, 10 West Pittsburgh St., Burgettstown. Dumping rubbish on State Game Lands	25.00
Westwood, Samuel Downs, R. D. No. 1, Charleroi. Possessing live raccoon without permit	25.00

WESTMORELAND—\$90

Baker, Carl, 1007 3rd Ave., New Kensington. Failure to display license tag while hunting	20.00
Curry, James Oliver, R. D. No. 1, Box 92, Greensburg. Dog chasing game in closed season	10.00
Evanski, Jessie, 1221 Martin Ave., New Kensington. Possessing groundhog taken in closed season	10.00
Jackson, Wilbert Francis, R. D. No. 2, Irwin. Killing woodchuck in closed season	10.00
Paden, Kenneth Darrell, R. D. No. 2, Irwin. Possessing one groundhog taken in closed season	10.00
Tedrow, George, 126 W. 2nd St., West Newton. Failure to display license while hunting; Possessing one woodchuck in closed season	30.00

WYOMING—\$195

Fargo, Charles Stanley, 111 Putnam St., Tunkhannock. Failure to visit beaver trap within 36 hrs.	50.00
Hubbell, Nelson, Noxen. Possessing one grouse in closed season; Possessing parts of deer in closed season	125.00
Fronzek, John, R. D. No. 2, Falls. Attempting to collect bounty on two foxes by deception	20.00

NON-RESIDENT—\$20

Wolfe, Charles Elmer, 994 Armstead Way, Baltimore, Maryland. Giving false information to obtain a resident hunting license ..	20.00
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OUR DEER HERD—from Page 5

Michigan. From that year until 1925, a total of 1,192 animals were purchased and released. During this period we bought deer from dealers in Michigan, Ohio, Kentucky, Maine, New Jersey, North Carolina and New Hampshire. Interesting, too, is the fact that 524, or almost half of the total purchased, were obtained from propagators in our native State. In 1907 the famous Buck Law was passed. In 1920 we purchased our first State Game Lands. The emphasis was always on the purchase of big game territory.

Everything so far was "rosy." Recent lumbering operations had made Pennsylvania a veritable paradise for white-tailed deer. This optimum condition, plus the legislation, protection, stocking, land purchase, and *more important the establishment in the minds of our hunters the firm belief that Pennsylvania would once more be a great "deer State" due to our efforts and their cooperation*, established a deer herd beyond our wildest dreams.

The came dread reality. In 1923 the Commission asked for, and received, the power to declare a special season on female deer with a special license of five dollars. The furor which existed prior to the enactment of the Buck Law was but a mild zephyr compared with the storm of protest which met the announcement that the "sacred" does were to be slaughtered. Well-meaning sportsmen bought and tore up most of the one hundred licenses issued. During that first "doe season" only eight does (and two antlered bucks by mistake) were killed in order to afford relief to the orchardists of two townships of the south-central county to which this season was restricted.

What a job of super-salesmanship! In but sixteen years since the passing of the Buck Law we had completely reversed the outlook of our sportsmen so that the protection of the doe—the source of future deer hunting—was so paramount that even now, a large number of our licensed hunters cannot see that our deer herd is too large for its range and that antlerless seasons are necessary in order even to attempt to keep it within normal limits.

There is no denying that all the game management practices we employed were productive because in approximately years we established a deer herd estimated at slightly over one million individuals. And this, in the second most highly populated State in the Union. Where, then, had we "hoisted ourselves on our own petard?"

First, *we did not take into consideration the natural growth of our forests*. At the turn of the century, following state-wide lumbering operations, the range was ideal. Earlier in this presentation I gave you the picture of those forests today.



"Once typifying a noble sport and a noble trophy . . ."

Secondly, *we did not then realize the natural reproductive rate of the white-tailed deer*. We passed all conceivable laws to permit a maximum increase of the herd. But we could not foresee the rapidity with which this same herd could pyramid itself into such inconceivable numbers.

Thirdly, *We did not anticipate the fact that we were creating such an army of deer hunters—an army that now includes approximately 400,000 members*. Almost half of our licensed hunters are deer hunters—men who have seen the herd grow, and with the creation of roads through our wilderness areas, have been able to take more and more deer. This they can see, and appreciate, *but they cannot, or will not, see our present problem, let alone the inevitable results that will follow unless definite control measures are established*.

We would have been far better off had we permitted the killing of deer, not only bucks, even during the early days when we were attempting so strenuously to build up our herd. Our forests would now be in better condition, we would have a balanced, though smaller, deer herd, and we would have less but better deer hunters.



WILD LIFE **CONSERVATION**

Your duty as an American



By Brufene O. Thoman, Beaver Vocational School

1949 PENNSYLVANIA UPLAND HUNTING SEASONS

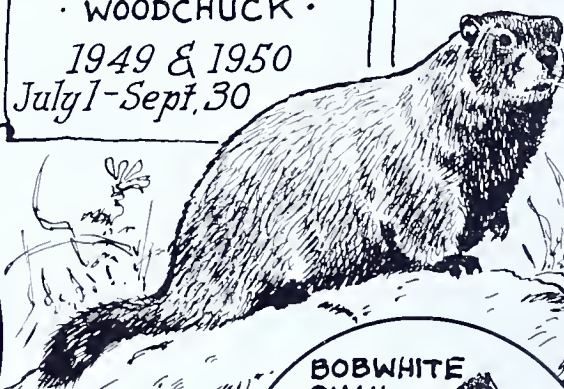
• GREY •
• SQUIRREL •
Nov 1 - Nov 26



• WOODCOCK •



• WOODCHUCK •
1949 & 1950
July 1 - Sept. 30

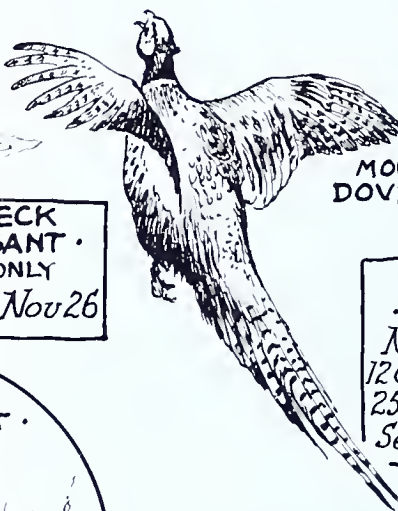


BOBWHITE
QUAIL •
Nov 1 -
Nov 12



• RACCOON •
Nov 1 - Feb 1 - 1950
Season Limit 35

• RINGNECK •
• PHEASANT •
COCKS ONLY
Nov 1 - Nov 26



• MOURNING
DOVE



• WILD •
• TURKEY •
Nov 1 - Nov 26
12 Counties Restricted
25 Counties Closed
Season Limit 1



• BLACK •
• BEAR •
Over 1 Year Old
Nov 14 - Nov 19



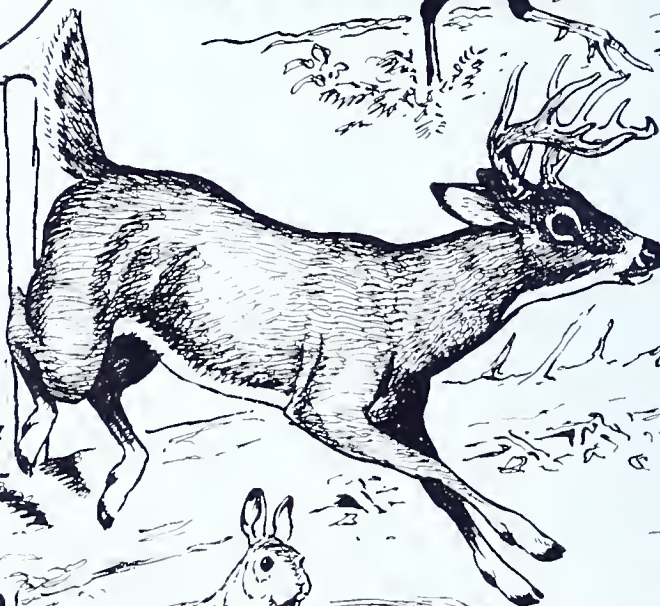
• COTTONTAIL
RABBIT •



Nov 1 - Nov 26

• WHITE - TAILED
• DEER •

Bucks with 2 or
more points to
one antler
Nov 28 - Dec 9
(Antlerless Deer
Statewide)
Dec 10 only
1 Deer Per Person
Either Sex



• RUFFED •
• GROUSE •
Nov 1 - 2 - 3 -
10 - 11 - & 12



• SNOWSHOE •
• RABBIT •
Dec 19 - Jan 2 1950



JACOB
BATES
ABBOTT

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PENNSYLVANIA Game News



P38.34
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OCTOBER 1949

TEN CENTS



The GAME NEWS

WILLARD T. JOHNS, JR.
Editor



PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA

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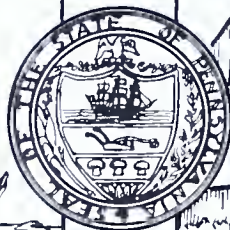
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DUCK REGULATIONS

By Leonard Foote

★

WHEN THE FLOCKS
COME DOWN

By N. R. Casillo

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THE SPORTSMEN

By Roger Latham

COVER

"Hatching the
October Crop"

By

Jacob Bates Abbott

HUNT SAFELY WEEK

October 16-22

In keeping with the traditions of the past, Governor Duff recently proclaimed the third week of October as "Hunt Safely Week." This year his proclamation was more than a plea to handle firearms carefully—it was a grim reminder of the obligations a man owes himself, his family and his fellow man. In his statement the Governor said:

"Hunting is just as hazardous or as safe as the hunter makes it. It can be much safer than numerous competitive and combative sports. It will remain unsafe as long as a man places his quarry above his loved ones, above his hunting companion, and allows his over-enthusiasm or an itchy trigger finger to account for—not a piece of game—but a human life or limb."

Safe hunting, then, is a personal matter. It cannot be shrugged off with an attitude of "let somebody else take care of it." When driving a car, we must not only watch ourselves but, also, the drivers of all the other cars on the road. But unlike automobile drivers, hunters are not confined to definite narrow paths. The man with the gun can be anywhere at anytime, in the fields, forests, highways, or homes. He cannot be controlled by stop-lights, police patrols, and warning signs where there is danger. He must use good judgment to safeguard himself and others against the dangers and he is therefore entirely responsible for his own actions.

The cause of hunting accidents does not lie in any difficulty of handling a gun—a gun is not difficult to handle. Rather, greed and carelessness are the causes for shooting accidents. It does require proper handling of the gun, however, to prevent those accidents. Yet all that needs to be known—and practiced and followed—are the simple, common sense rules of safety. In Pennsylvania those rules are furnished in a little leaflet that is given to every licensed hunter—rules everyone should know and practice. In addition they have been given widespread publicity in both the press and radio and surely every gun handler in the State has at least heard them. Now they are even presented in a new and novel form in this issue of GAME NEWS—a poem that can be easily learned and can permanently serve as a reminder on how to handle a gun the safe and sane way to avoid accidents.

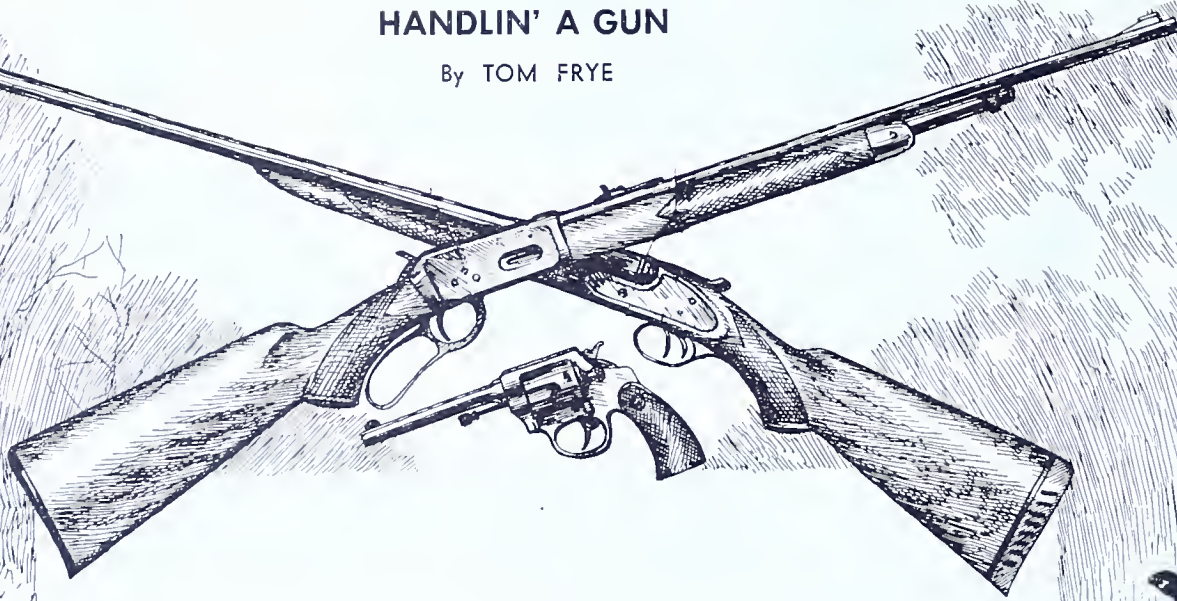
A gun is as safe as you make it. And hunting can only be as safe as the gunners who go hunting! The fact that almost a million hunters went afield last fall in Pennsylvania did not make the headlines. The fact that 413 of them were injured and 23 persons killed by gunshot did!

It is your duty to not only hunt safely but to teach others those simple rules of gun handling. "Hunt Safely Week" is designed to emphasize that responsibility. Learn them; then teach them to everyone who handles a gun. It will mean more pleasure afield for all.

Remember, the only way to FEEL SAFE, ACT SAFE, and BE SAFE is to hunt with your gun ON-SAFE until you are ready to shoot!

HANDLIN' A GUN

By TOM FRYE



"ALWAYS BE CAREFUL" when handlin' a gun,
 "DON'T POINT THE MUZZLE TOWARD ANYONE;"
 "ALL GUNS ARE LOADED" so treat 'em that way,
 "ALWAYS PLAY SAFE"—don't be sorry some day.

"KEEP GUN ON SAFE" 'til you're ready to shoot,
 You can stumble and fall with a slip of the boot;
 With hammer back or "off safe," gun is ready to kill
 If touched by a twig, or a dog—and it will!

Before going over or under a fence
 "BREAK YOUR GUN"—that's common sense
 To prevent shooting self, brother or dad,
 Or maybe the best pal you ever had.

"DON'T CLIMB A TREE WITH A LOADED GUN,"
 "OF YOUR TARGET—BE SURE"—it's the right one;
 "DON'T SHOOT AT FLAT SURFACE" of water or land
 And "KEEP YOUR GUN CLEAN" from dirt, snow and sand.

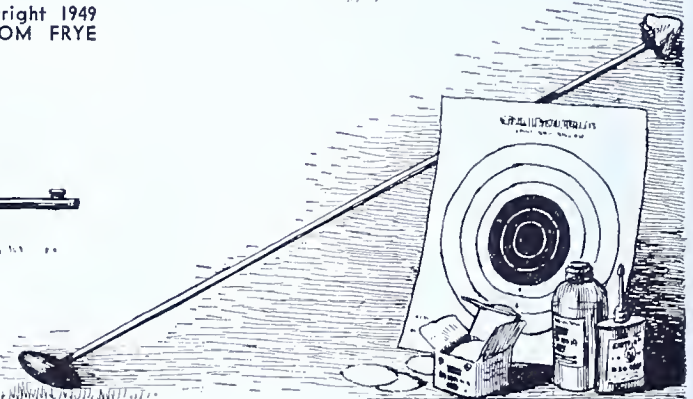
"DONT LEAVE YOUR GUN 'TIL YOU UNLOAD IT" first,
 To do otherwise could be one of the worst
 Things you could do, 'round car, camp or home,
 "BE SURE YOU UNLOAD IT," be sure—then roam.

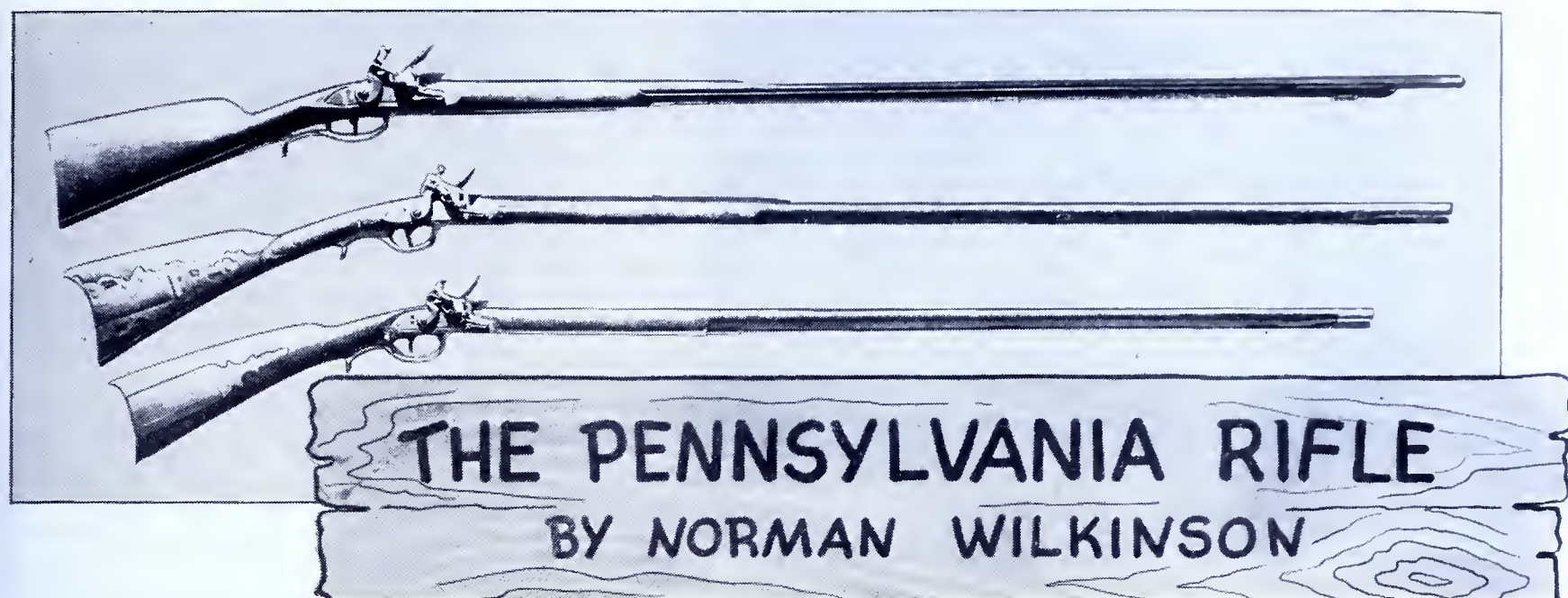
"DON'T MIX YOUR SHOTS WITH ALCOHOL,"
 'Cause that can bring a long range call
 From Gabriel, who'll frown and say
 "You're through on earth, you've had your day."

Many people are shot and killed each year
 Because some are careless and greedy, I fear;
 Shooting as sport can be safe and fine
 If you'll only be careful—take a little more time.

If you want to be safe and surely you do,
 Practice this wisdom, through and through;
 And teach all others, fathers and sons,
 How to be careful when handlin' guns.

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 TOM FRYE





Pennsylvania Historical & Museum Commission

WEAPONS have won worlds. From the earliest time when primitive man instinctively discovered he could multiply the effectiveness of his own two arms and hands by hurling rocks, throwing sticks, or whirling clubs, weapons have been used in all ages for purposes both good and evil. Before man learned the arts of agriculture and architecture he obtained food, clothing, and shelter by the almost exclusive use of his weapons. With them he fought off human and animal enemies, and in time extended his power over other beings, who, for lack of equal or better weapons, could not resist him successfully.

Control over weapons created militant dynasties, imperial domains, and powerful national states. By their use in other hands, and by the improvement or invention of more potent types, in recent times tyrannies have been overthrown, absolutisms abolished, and empires dissolved. In the long history of mankind the knowledge of his weapons tells how he sustained life, protected his family, gained certain physical comforts, amused himself, and how, through weapons, changes were made in his social and political organizations.

One epoch that illustrates the reliance of man upon his weapons in several of these respects can be seen here in America during the century extending from the 1730's to the 1830's. It was in this span of years that our early settlers applied their knowledge of European firearms to the development and perfection of the Pennsylvania rifle.

Before the German, French Huguenot, and Swiss immigrants settled in large numbers in Penn's colony early in the eighteenth century, the firearm in general use was the English smooth-bore musket. Among the newcomers were German and Swiss craftsmen skilled in the making of the Jaeger, a short, heavy hunting rifle, and the Swiss mountain rifle, a lighter, longer firearm. The distinctive feature of both guns was the rifled barrel, a technique devised late in the

fifteenth century by Caspar Zöllner, a Viennese gunsmith. Some authorities give the name as Gaspard Zeller, and place him in Nuremberg during the sixteenth century. From experience, hunters stalking boar and deer at close range in the German forests, and Alpine hunters out after mountain sheep and wild goats, had learned that the twist given a ball shot from a rifled barrel increased both its range and its accuracy. Conservatism and tradition seems to have prevented the acceptance of the rifled barrel in aristocratic and military circles for its use appears to have been confined to hunters and marksmen of the lower social orders for many years.

In their new home in eastern Pennsylvania the migrant gunsmiths soon found a welcome among settlers and pioneers dependent upon guns to provide meat for the larder, furs and skins for barter, and for defense and offense against hostile Indians. The first guns made by the newcomers were essentially duplicates of those used in Europe, but it was soon obvious that these were too heavy, of too large bore, badly sighted, hard to load, and too unwieldy for the prolonged trips of hunters and settlers into the wilderness. Conditions of the new environment, abetted by the complaints and suggestions of their backwoods customers, compelled the gun makers to make numerous changes on the older models until they had produced a distinctive firearm that was light in weight, graceful of line, sparing of powder and lead, and deadly accurate in the hands of a skilled rifleman.

A typical Pennsylvania rifle weighed from seven to nine pounds, its overall length was a symmetrical 55 inches from muzzle to butt plate, and its .45 caliber ball could kill man or beast at 300 yards, or "bark" a squirrel from the tallest tree. Erroneously named the "Kentucky" rifle because of the feats performed with it by Daniel Boone and other woodsmen in winning the "Dark and Bloody Ground," this superb weapon was the cre-

ation of several generations of Pennsylvania gunsmiths. Among the better known makers were Henry Albright, Daniel Boyer, Matthew and Peter Roesser, Thomas Butler, Jacob Dechard, Peter and Henry Leman, Philip Lefevre, Martin Meylin, Henry Dreppard, numerous members of the William Henry family, and several Pannabeckers.

The first rifle shops appeared along streams in and around Lancaster, a priority that sometimes has led to the more particular name of the "Lancaster" rifle. But as settlement moved westward and northward gunsmiths plied their trade in Berks, Lebanon, Northampton, Snyder and Union counties, and through the Cumberland Valley. Records show that Pennsylvania gunsmiths were also induced to migrate into several parts of New York colony and at the time of the American Revolution, Pennsylvania rifles were being made in Maryland, Virginia, North Carolina, and Georgia. It is a question whether the German and Swiss makers ever held a monopoly of the business for any length of time, for English features are evident on some of the older rifles, and makers' names inscribed on many guns are unquestionably English, Welsh, and Scotch-Irish. Though Germanic in its origin, the perfected Pennsylvania rifle was the product of the talents of ingenious and inventive artisans of several nationalities whose final handiwork scarcely resembled the parent types from which it had been developed.

Making a rifle in the eighteenth century was a slow, painstaking task requiring about a week's time. Its cost might vary from \$10 to \$50 or more depending upon the ornamentation and engraving that went into it, but when finished it had detailed characteristics that distinguished it from all other guns. A name expressing pride or endearment was often given a gun by its owner, thus imbuing it with a personality impossible under mass-production methods. Of the forty to fifty parts that went into its con-



Early Pennsylvania riflemen carried ornate accessories including the hunting knife, powder horns, iron game carrier, and bag displayed above by George Landis.

struction the barrel was the most important and the one that required most skill. In the absence of boring machines capable of cutting a straight hole through an iron bar forty or more inches in length, the smith and his apprentice heated a bar of prescribed length, and then bent and welded it around a rod somewhat smaller than the desired bore. This was tedious and could be aggravating if bar and rod were accidentally welded together. Superstition dictated that welding be done from the middle toward both ends in order to purge any devils that might be up to troublesome pranks. Annealing was done by burying the barrel in a fire of chestnut wood and allowing it to remain there until the ashes had cooled. It was now soft enough for cutting the barrel into the conventional octagon shape. A steel-edged bit cut the specified bore and this was then straightened by running a taut thread along the bottom of the bore; where the thread did not touch the bore the barrel was struck with a heavy lead hammer with just enough force to take out the kinks and not produce others.

The barrel was then placed on the rifling machine for cutting spiral grooves into the

bore. The most common rifling process cut seven square-shaped grooves; some rifles had more or less grooves, and the shapes varied, some being ratchet, concave, or "V" shaped. Widths and depths of the grooves also varied, as did the degree of twist, though one turn in 48 inches was the recognized standard. Rough spots and blemishes in the grooves were then smoothed off by rubbing with some abrasive material affixed to an iron rod pushed back and forth through the bore. Final work on the barrel consisted of threading the breech with a handmade top, screwing the breech plug into position, and affixing front and rear sights; sights were fashioned by hand out of iron, brass, or German silver. The last step was browning or blacking the barrel with cider vinegar or a combination of chemicals to prevent rusting. Of equal importance, it also lessened the chances of a rifleman being betrayed to game or enemy by reflected sunlight glinting along the barrel of his gun.

Locks for the rifles were sometimes made by the gunsmith but locksmiths who specialized in their making supplied many. The frequent appearance of the names Ketland and Company, and Bird and Company

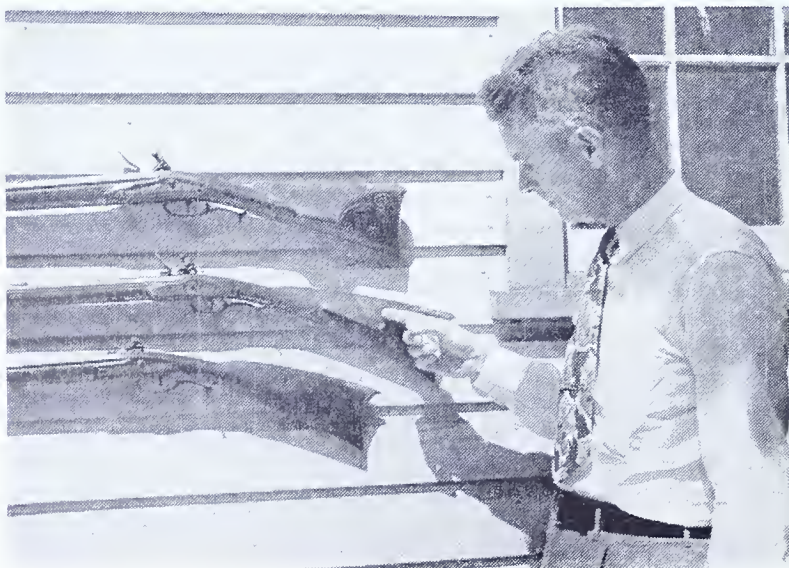
stamped on locks indicates that these English firms were other sources of supply. The hammer of the lock was forged on the anvil and then filed into graceful, accurate shape; springs were fashioned from old swords, bayonets and saws, and so carefully tempered in a charcoal forge some of the springs today retain some of their elasticity. Nearly all flints were imported from England because of their superiority to any found locally. Triggers and parts of the trigger plate were made by hand, generally of simpler and sturdier design than those found on European guns. A second, or "set" trigger, that reduced trigger pull and muscle tremor was later added.

Favorite among woods for the gun stock was the curly maple, but walnut, cherry, and apple were also used. Supplies of stock blanks were kept on hand and seasoned over long periods of time. The channel into which the barrel fitted, the lock mortise, cheek piece, and patch-box were carefully carved into the stock before it was finally sanded smooth, stained and sometimes slightly charred to bring out the beauty of the grain. If not sufficiently decorative a tiger-stripe decoration might be given the stock.

Early rifles were somewhat plain and devoid of ornament, but later makes were richly decorated with brass, silver, and occasionally gold inlays in the form of stars, crescents, birds, dogs, fish, rabbits, and other designs. Relief carvings of like designs are to be found on rifle butts and on cheek pieces. These were not solely decorative for in the mind of the owner they endowed his weapon and himself with mystical powers over the creatures pictured. In the patch-box, a hole cut into the right side of the stock and covered with an elaborate circular or oblong brass plate, were carried greased skin or linen patches that were wrapped around the balls upon loading the rifle. Tokens, amulets, and pieces of paper bearing a cross or star and a magical incantation, have been found in patch-boxes. One bit of verse of occult force that might turn a man's weapon into a "Freischutz"—a rifle that never fails, read

"Load a gun with a bullet, cast on a crossroad on Christmas Eve, and it will hit the mark or bring down the game without fail."

Ramroads for loading and wiping were made from hickory and frequently striped in the manner of a candy stick or a barber pole. The rod was used to set the ball on the powder, to clean the bore, and, with a "worm" attached to one end, it could pull out an unfired charge. A slow burning black powder was contained in a translucent powder horn, and a fine-grain powder to be used for priming was carried in a smaller horn or flask. Round lead bullets varying in caliber from .18 to .58 were cast in moulds slightly smaller than the bore of the rifle. The most common calibers for hunting scaled from .30 to .45; from a pound of lead 52 balls of .45 caliber could be cast. Bullets, lead, mould, and extra flints and patches filled the buckskin hunting bag that hung from the hunter's shoulder as he set forth with his rifle balanced lightly in the crook of his arm.



The author inspecting relief carvings on rifle butts at the Landis Valley Museum.

The reputation of the Pennsylvania rifle first rested on its efficacy in procuring food and skins and furs. In emergency it could be adapted to making a fire, and it furnished one of the major diversions of the pioneers in their target matches or rifle frolics. It early proved itself in warfare with the Indians, and so impressed with the "firestick" were the red men that they eagerly bartered generous supplies of furs and skins in exchange for a rifle.

But its "finest hour" came when the American colonials took the decisive step of separating themselves from the Mother Country, for there is abundant evidence that the Pennsylvania rifle was a significant contribution to the winning of American independence. After Lexington and Concord, when the Continental Congress realized that war was unavoidable, it issued a call on June 14, 1775 requesting the raising of six companies of expert riflemen from Pennsylvania, two from Maryland, and two from Virginia. Each company, when completed, was instructed to march to Boston and join the army, there to be employed as light infantry. It may have been the marksmanship of these or other units of riflemen that prompted the English Parliament in 1776 to inquire

“about those strange rifled arms used with such deadly certainty by several regiments of the American army.”

Gunsmithing became a vital industry under

virtual control of Congress. It decreed that all guns should be delivered to the patriot army and fixed the price paid for them. Gunsmiths' apprentices who had enlisted were returned to their masters, and smiths were warned by the Committee of Safety that if they refused to make guns for the armed forces, it would

“have their names inserted in the minutes of the committee as enemies of their country, and be published as such, and their tools be taken away from them and they should not be allowed to carry on their trade.”

Louis and Michael Busch, Lancaster rifle makers, were arrested for failure to sell their guns to the government, but dissatisfaction with the fixed price of 24 shillings for a gun barrel was well-nigh universal when it was known that £4 5s was being paid for muskets. What amounted to a strike by gunsmiths resulted in their receiving higher prices for their guns. William Henry received orders for large numbers of rifles to be supplied units of riflemen from Lancaster, Berks, York and Cumberland counties. In all, nine companies of riflemen were raised in Pennsylvania and placed initially under the command of Colonel William Thompson of Carlisle.

Pennsylvania and Virginia riflemen were part of the ill-fated march against Quebec led by Benedict Arnold, but the bitterness of this defeat was palliated by subsequent

victories at Saratoga and King's Mountain. In these engagements riflemen, or "Tomahawks," as they were called, constituted large segments of the American forces. In a reply to Washington's request for the return of the riflemen sent to aid Gates at Saratoga, Gates remarked

"In this situation Your Excellency would not wish me to part with the corps the army of General Burgoyne are most afraid of."

A peculiar irony involving the use of guns attaches to the name of Major Patrick Ferguson, commander of the English loyalist forces who was killed by a rifle shot at King's Mountain. Late in 1776 Ferguson had invented an effective breech-loading rifle, some of which were used by riflemen under his command at the battle of the Brandywine. Upon Ferguson being wounded and out of action for a time, his superiors ordered the new guns out of service and placed in storage. The rifle and the methods of fighting employed in its use were not acceptable to the professional soldier of the eighteenth century; had General Howe and other English military minds been less conservative the fortunes of war might have been reversed. Not until well into the nineteenth century did European armies abandon the musket in favor of the rifle.

In the hands of Adair's Kentuckians and Carroll's Tennessee frontiersmen, the Penn-

(Continued on Page 26)



Henry Landis, curator at the Landis Valley Museum, demonstrates an early Lancaster County rifle bench, used in the making of Pennsylvania rifle barrels.

Those Big Little Things

BY BILL WOLF



GIVE a man an axe he can use, and he can practically live in a wilderness with it as his only weapon and tool. He can employ it to make a shelter, to create a bed in the shelter, to cut firewood; he can whittle various utensils with it, or use it to construct deadfalls, spring snares and other devices for game, or to build brush fish traps. If necessary, a sharp axe can be used to clean fish and to skin animals. It can be used to make a bow and arrows, a paddle or almost anything needed for survival.

It's one of those big little things that can add so much pleasure to your outdoor experiences if it has been selected carefully—or which can cause a lot of misery if picked unwisely. There are other things in the same category—such as knives, compasses, cooking utensils—but I believe the axe is the most important of the lot. No man should go hungry, cold or wet in the woods if he has a good axe.

Please note, however, that at the beginning it was specified “give a man *an* axe he can use.” There are axes and axes, and not all of them are useful. For instance, I have watched boys out camping chopping firewood and doing all their cutting with hand axes, the kind commonly carried on the belt in a leather sheath. These usually run from ten to twelve inches in overall length including the handle, and are about as useful as a blunt club.

Even when sharp—and many of the thousands sold annually won't take a good edge—they are inefficient for anything except cutting twigs for kindling, putting blazes on trees or using the flat side of the

head as a hammer. This is surely a limited repertoire for the most important article in outdoor living!

Have you ever watched anyone trying to chop through even a fair-sized stick with one of these abominations? Or perhaps you have tried it yourself. It's a matter of hack and chop until the thing is chewed through, rather than cut through. The fault, of course, is in the length of the handle. It is too short to give any heft to a blow with the hand axe. As a result, the user employs too much energy for the results accomplished, and chopping becomes a weary task instead of an easy job. There is a smaller hand axe made as a single piece with a metal edge guard, and it is even worse than the ones carried in a sheath.

What, then, you may ask, does a man use outdoors as an axe? Surely not a big single or doublebitted axe such as timber cutters employ?

It all depends upon the circumstances. If the axe is to be carried to where it will be used by automobile, canoe or boat, then a good large axe is ideal. Best, of course, is the single-bitted axe, because the flat part of the head can be used as a hammer to drive stakes or nails.

If, however, it is necessary to tote the axe personally, as on a camping trip where supplies are packed in on the back, the long-handled standard axe becomes impractical. Unless it is carried by hand near the head—which is a nuisance—the long handle make it unwieldy. It can't be strapped to the pack without causing trouble.

I use what I consider a nearly ideal solution to this problem of getting a small axe that will do the work of a big one. I have carried it with me on camping trips each year for the past ten years, and have no complaints to make about it. In fact, I regard it with considerable affection because it has been a good companion so often on the trail.

This is a modified Hudson's Bay cruising axe with an in-between 24-inch handle, a wide bit and a narrow head. The modification from the standard Hudson's Bay cruiser consists of a slightly wider poll, or head, than the original which looks almost like a tomahawk on a fairly long handle, and which is almost standard equipment away up north where men wanted a small axe with big abilities.

The 24-inch handle enables the user to get a good swing, and I'll guarantee it to go through anything but big timber—and no one in camp ever has any reason to chop down huge trees. It will do nearly everything that a big axe can do, its handle is short enough so it can be strapped to the packsack, and it is light in weight, weighing a total of 1¾ pounds. The only minor drawback is that the handle has a slight tendency to work loose if the wood dries

out, and this is solely because the length of the eye is small. To overcome this, I soak it in water after a winter of drying out, set the wedges and it's ready for use.

Several firms make these big-little axes. My own came from L. L. Bean, Freeport, Maine, but it was made by another company and sold under Bean's name.

I do have one hand axe. It was made by a friend who is an expert metal treater, and it is carried along sometimes strictly as a supplementary tool. I would not depend upon it alone although I consider it an excellent hand axe, tops in its own class. It is made as a solid piece of metal, with a fairly heavy head, a very thin-metal handle and a thin grip. The hand can get a good grip on this thin handle, even when wearing a glove which isn't exactly advisable for using an axe, and the weight of the head makes it fairly effective.

This same friend made a hunting knife for me according to my specifications, and it will be mentioned later; but now I'd like to call attention to the sheaths he also made for both axe and knife. The axe sheath has copper rivets, the knife sheath is bound with copper wire. There's a good reason for both. The usual metal rivets found in commercial sheaths will take the edge right off any knife or axe blade that comes in contact with them. Copper, however, is soft and won't affect the steel knife or axe. Look for such minor refinements when buying a sheathed knife or axe.

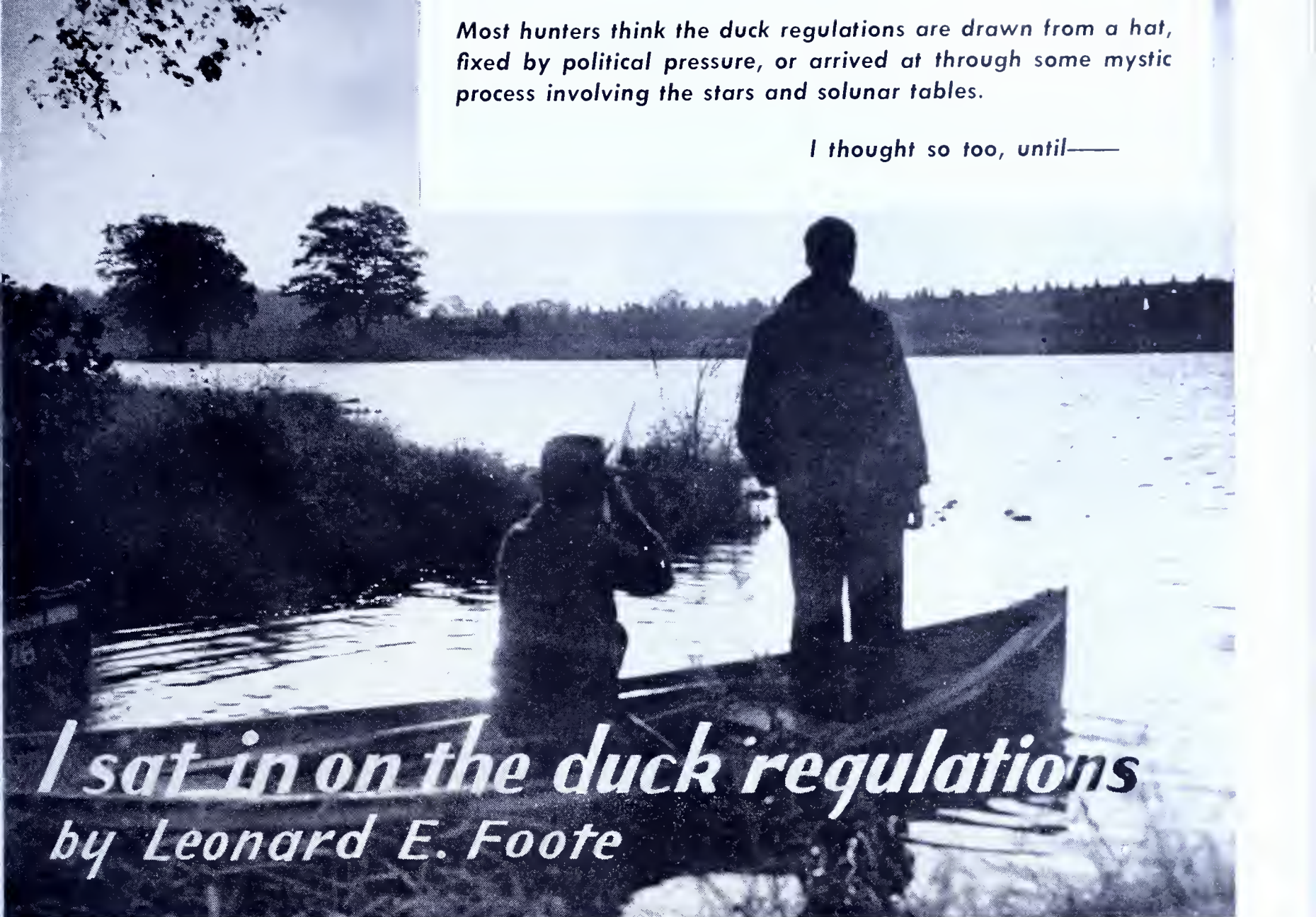
Perhaps the sorriest piece of equipment used by the outdoorsman is his “hunting knife.” In many ways, this is his own fault. He insists on a big, clumsy hunk of metal with a nice bright stainless steel

(Continued on Page 23)



Most hunters think the duck regulations are drawn from a hat, fixed by political pressure, or arrived at through some mystic process involving the stars and solunar tables.

I thought so too, until—



I sat in on the duck regulations

by Leonard E. Foote

I'M AN average duck hunter, if there is such a thing, one of the two million Americans who bought duck stamps in 1948 and who sat shivering in blinds waiting for ducks that didn't always drop in. Like the average hunter over the nation, I killed seven ducks in 1948. I didn't kill any geese because goose hunting was too expensive for my middle-class pocketbook.

On those fruitless bluebird days—and there seemed to be too many during the 1948 season—when neither breeze nor whistling primaries break the silence of the marsh and the greenhead blocks ride woodenly on slack tethers in the glassy calm, a duck hunter has little to do but think. On such days I often pondered, as I anxiously watched the barren blue sky, if the government was giving me back a full return on my duck stamp dollar. I wondered just how these waterfowl regulations, which as a sportsman I was obliged to observe, were made and who made them.

I wondered how California hunters had managed to pull enough strings to get 35 days of shooting in 1947 while we tide-water Atlantic coasters had to be satisfied with only thirty. Some hunters last fall felt more strongly about this than ever, when the west coast was offered 40 days and the poor, persecuted Atlantic seaboard hunter was still held at a miserly 30 days. They felt just as strongly about our four duck limit, with the two western flyways being allowed five ducks per day. Yes, if

it hadn't been for an experience of my own last summer. I would be complaining just as loudly, and perhaps louder than the rest.

This experience all started when I decided to do something about getting first-hand answers to my questions about regulations. To do this, I made some "arrangements," obtained special permission, and sat in with the migratory bird regulations committee. Don't ask how I did it—that's top secret.

At the first meeting of the committee, I was pretty cocky. I figured I knew as much about ducks and duck hunting as any of the others on this committee. After all, I'd been a duck hunter from the time I was old enough to lift a double-gun. Brought up within a long fly cast of Podunk Pond, I'd roamed its shores and hunted its coves all my life. I hadn't hunted only ducks either, I'd killed my share of doves, woodcock, rails and geese around this pond, and I felt pretty well qualified to give advice on regulations for any migratory species.

Even before we got down to business, however, I began to realize that I was the low man on the totem pole when it came to a knowledge of ducks; or of doves, woodcock, rail, or geese for that matter. When I spoke to one member of the committee about Podunk pond, I found immediately that he knew more about my favorite hunting spot than I did. There were eleven on the committee, and each of the others had been to the far corners of North America and had an intimate knowledge of waterfowl on the breeding grounds and in the

wintering areas. Committee members represented every phase of the national wildlife conservation movement, had seen the market hunter replaced by the American sportsman, and passive conservation transformed into an active restoration program.

The combined experience of these committee members covered every phase of the conservation consciousness that has developed slowly in this country since 1900. Some of the members represented the nature lovers who derive pleasure from watching, photographing and studying birds, rather than from hunting them. While I was at first suspicious of this element, I soon found that they did not object to reasonable hunting and that they regarded all wildlife as a natural resource to be used in the best public interest. Hunters, myself included, are too prone to think of America's wildlife heritage as theirs alone rather than as a resource to be shared by all the peoples of the Americas. This is especially true of migratory fowl, a part of our fauna which touches two continents and many nations. Most of us who hunt, selfishly, perhaps, want a louder voice in the forming of regulations. Yet, we hunters already were well represented on the migratory bird committee.

As a committee member pro tem, I found out one thing fast. With the national waterfowl picture before me in the form of tabulated hunting statistics, kill data, and detailed census records, it was necessary for me to say "no" to the relaxation of restrictions that had seemed senseless when I was



Game Protector Wallace Woodring, right, and Deputy Game Protector Barton Sharp erecting a wood duck nesting box on State Game Lands in Lancaster County.

looking at the problem from the narrow view I had from that blind at Podunk pond. I soon found that the duck supply is not inexhaustible although the number of hunters and their suggestions for seasons and bag limits sometimes seem to be.

Since the end of the war, hunting has increased steadily in popularity while drainage of marshes, drouth, and a host of other factors have pushed our duck supply downward. Today there are four hunters in the field and on the marsh for every one in 1936, and our increasing human population has been placing more and more pressure upon our land and water resources to meet human demands for food, clothing and shelter. Conservation agencies cannot begin to restore to the ducks the amount of land and water that is being appropriated for use by man. This has been true in spite of a renewed public interest in the real and aesthetic values of wildlife; it has been true in spite of vastly stepped-up programs of conservation agencies.

The migratory bird committee is the focal point for all types of information on the supply and demand for migratory game. I first reviewed, as an ex officio committee member, the proceedings of the 11 public hearings held earlier by the U. S. Fish and Wildlife Service in major cities from Boston to Seattle in 1949. This was the third year these hearings were held. They offered an opportunity for any citizen to criticize and comment on any phase of migratory game management, including regulations, and for the most part, the suggestions and criticisms offered were constructive.

Because I was interested in the waterfowl hunting regulations, I had made it a point to attend the five public hearings held nearest my home. I had read an article in the press by a western sportswriter who had predicted that these meetings would be gagged. It was a pleasant surprise, therefore, to have found that avid discussion was invited and to find later that all suggestions made by sportsmen at these hearings were considered by the regulations committee. Furthermore, some of the suggestions were incorporated into the 1949 regulations. These public hearings were wide open to discussion, and those conducting them replied to honest questions with honest, straight-forward answers.

Practically everyone had something to say at the waterfowl hearings. While I already knew that regulations were a debatable subject, because local hunters in my own town had more ideas on seasons, bag limits and shooting hours than you could pack into a ten-gallon hat, enough entirely different ideas were advanced at these hearings to fill half a dozen sombreros, Texas style. In fact almost everyone attending the meetings had a pet theory which he offered to satisfy every duck hunter's wildest dream and still send more ducks north in the spring than the breeding grounds possibly could support. I'd heard these miracle formulas before, however, and had made up my mind early that someone was talking through his Stetson.

After reading the proceedings of the hearings which I did not attend, the committee handed me an analysis of a four-drawer

file full of letters from people who had been unable to attend any of the meetings. This analysis contained another list of "if" ideas, many of them practical but others, although well-intended, were about as useful as a lightning rod in a duck blind. After going over the summaries of this correspondence, I read the recommendations of several hundred federal biologists and game management agents who were stationed from Point Barrow to Yucatan. I saw a tabulation of the wintering ground census, conducted in three consecutive days by Service personnel from the Alaskan peninsula to Venezuela and Colombia. This tabulation was arranged according to flyway: Pacific, Central, Mississippi, and Atlantic. Here, indeed, was a vast reservoir of information which showed at a glance the number of waterfowl by species in each of these four major areas.

Hundreds of contributors, many of them personnel of state game departments and other conservation agencies, had collaborated with the Service on this simultaneous, over-all appraisal. Several Service biologists had made inventories of the West Indies, Cuba, the Dominican Republic, and the Bahamas, as well as Mexico and Central America, with the assistance of Army, Navy, and consular services. No stone had been left unturned to complete this sweeping inventory, and if there was a continental picture of the waterfowl situation as it existed in January, 1949, this was it.

The continental census had been made in small blocks, as it had been for the past 10 years, and the waterfowl were counted in plotted units as small as a county. I noticed great differences between adjacent tracts selected at random. Some showed fewer ducks in 1949 than in 1948 while others had equally great population increases. In the aggregate, however, the over-all wintering population showed an increase of 12 percent. Now I realized the foolishness in basing recommendations for the national season regulations upon my limited experiences with ducks at Podunk pond.

Reports from the breeding ground censuses were the most interesting of all the information I received at the committee hearings. Certainly every effort had been made to secure an accurate appraisal of the summer production, not only by U. S. Fish and Wildlife Service personnel but by "keemen" of Ducks Unlimited, biologists of the Wildlife Management Institute at two research stations at Delta, Manitoba, and Fredericton, New Brunswick, by technicians of the Provinces, the Dominion Wildlife Service, the Alaska Game Commission, and the many state fish and game departments and universities in the United States.

Here again, the amazing spirit of cooperation was evident among many different conservation agencies to obtain an accurate summary of waterfowl production. Thousands of miles of almost inaccessible northland were censused systematically on foot, by canoe, car and plane. Most of the agents and biologists working on this inventory had censused the same areas before and were as well acquainted with many of the lakes, sloughs, and pot holes on the extensive breeding grounds as I am with Podunk pond.

The biologists did more than count ducks. They tabulated nesting densities, sexes, and

the number of young to reach the flying stage for each adult on the marsh or slough. All this information I found to be vitally important in evaluating the season's crop and in determining the effects of rainfall, drought, agricultural activities, predation and disease on the number of ducks that would come south this fall. I discovered that in round figures, about 50 per cent of our continental waterfowl were produced in Canada, 25 per cent in Alaska, and the remainder here in the United States. Ten years ago the figures might have been different because then we had more marshes that are now farmland in the United States.

Over 750,000 ducks and geese were banded on the breeding and wintering grounds and at numerous state and federal refuges along the flyways. Many of these birds were banded in conjunction with the census of the far north. The Wildlife Management Institute, for instance, maintains banding stations in the Canadian Maritime Provinces and in Labrador, primarily to band black ducks. Trapping and banding ducks is not easy. On the Bay of Fundy, for instance, excessive tides must be contended with, and on the northeast coast of Labrador the only link with the outside world is a coastal motor launch which stops at the banding station only at three-month intervals. Nevertheless, these efforts are needed to appraise adequately the black duck populations that will be available to hunters in the eastern United States the following fall.

Banding has established the flyway concept for management and regulation of North American migratory waterfowl, and the regulations now are based primarily upon populations and movements within each flyway as a whole. This, I found, was the basic reason for the slightly more liberal regulations for the Pacific flyway. The Pacific and Central flyways held proportionately higher numbers of birds and had lower hunting pressure in relation to their duck stocks in 1947 and 1948 than did the Mississippi and Atlantic flyways. These birds seem to hold to their ancestral flyways and there is no reason why they should not be managed in accordance with their population fluctuations. Wisest use of the resource in the best public interest called for liberalization of hunting restrictions so the Pacific and Central states were allowed longer hunting seasons. Naturally, Atlantic and Mississippi flyway hunters claimed that the regulations committee had been partial toward the west, but if conditions had been reversed, the regulations would have too.

I realized almost at once that these waterfowl biologists and agents, whether employed by the U. S. Fish and Wildlife Service, the Dominion Wildlife Service, or the states, know far more about the duck situation than the average sportsman thinks they do. Most of the suggestions made by these biologists considered the duck crop first and the hunter second. These professional students of the waterfowl problem feel we must first assure an adequate breeding stock for the future and limit our harvest to the surplus. After all, when you come right down to it, this is not only sensible but it's good business. We can gouge deeply into our principal and have one last, bang-up fling of a duck season, or we can take the interest as it comes in and perpetuate

duck hunting forever. The choice is as simple as that.

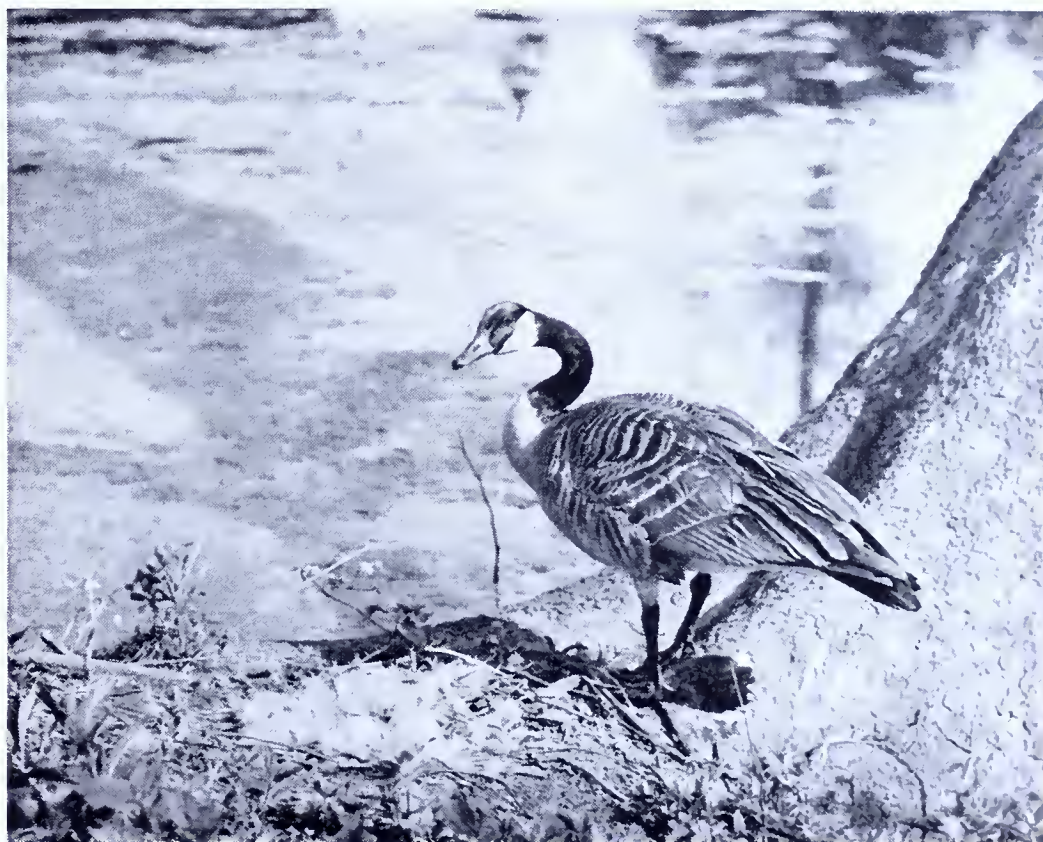
The proverbial shoe begins its proverbial pinch for the regulations committee when it starts to set bag limits and seasons. How best to divide the hunting opportunities among American hunters in 48 separate states and still allow Canada and Mexico their fair share of the surplus of the annual crop is one of the most vexing problems ever handed a group of eleven men. Because you simply can't please all of the people all of the time, this part of my new role did not appeal to me. An indication of impending difficulty came early when I was shown a letter from a representative of a state fish and game department indicating that his state was ready to secede from the Union and not assist in the observance and enforcement of the migratory bird laws unless the season there opened on October 1st instead of October 15th as it had previously.

Many letters from the state game agencies contained sound arguments, but a few obviously were dictated by political expediency. It was evident that uninformed but highly influential sportsmen had dictated their terms to the state fish and game director in these instances, and the director was only passing along their ideas to keep his job. On the other hand, the regulations committee had to establish some kind of order in the patchwork of seasons. This task was the most difficult facing the committee while I sat with them.

Consider, for instance, the plight of one small Atlantic flyway state, bordered by four others of its kind and sporting the highest gunning pressure per acre of duck marsh as well as some of the most vociferous sportsmen in the nation. Conflicts inevitably arise unless the hunting season prescribed in the regulations for this state generally coincides with that of its neighbor. Making

regulations for this state requires that the demands of its own hunters and those of four surrounding states be considered. Within each of these five political units are thousands of sportsmen, each with his own idea about the time the flight will arrive. Back in the good old days of the 90 day season it didn't matter. But today, if the 30 day season falls in the wrong month, the lynch mobs gather on the corner by the clubhouse and wait for members of the regulations committee and the state fish and game director. Moreover, when you have an increased hunting pressure, an error in the regulations would do more damage to the duck supply. Weather upsets duck schedules; weather upsets the best laid plans of sportsmen and the regulations committee. I was shown a large map of North America on which were plotted arrival dates of peak duck populations in the fall at all the major waterfowling areas and many of the minor ones. The average arrival dates looked fine on this map; it looked easy to set a pattern of thirty day seasons for all states which would allow nearly equal opportunities for hunting. Then I saw the fine print and the words "deviation from the average" under the arrival dates. This was the clincher: the "average deviation" from "average" peak population date was about 15 days. In other words, in five out of ten years, the biggest flight of ducks will arrive at Podunk pond between November 23 and December 22, either fifteen days before or after the "average" peak arrival date of December 7. During the other five years out of ten, the ducks might arrive on Podunk pond any time from the last of October to the middle of January. Back when we had the 90 day season it was easy for the regulations committee to play the averages but with

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"Over 750,000 ducks and geese, such as this one, were banded on the breeding and wintering grounds."

Karl Maslowski Photo



WHEN THE FLOCKS COME DOWN

By N. R. CASILLO

FROM the break of an uncertain dawn the storm grew steadily worse and finally forced the waterfowl legions to leave their nesting grounds. From every slough and creek, tundra pond and northwoods lake poured ducks, geese and swans.

Ordinarily, birds sense the approach of unusually severe weather long before it strikes, but for one of those inexplicable whims of Nature, the waterfowl and their kindred consorted happily in their north-land homes apparently oblivious to what was coming. Then, when the storm did strike they were reluctant to depart. The mild, languid fall had been altogether too misleading.

Now the trek was on. Nondescript flocks, lines of indeterminate lengths and wedges of every possible description streamed through the snow-filled sky at widely varying speeds, speeds depending on the species comprising the formations. A fast moving wedge of ultra-streamlined pintails quickly overhauled and then passed a bunch of black ducks. In the murky background a flock of belated baldpates flashed momentarily through the glimmer of the snow, intent like the rest of their kind, upon reaching regions of higher temperatures and the comfort and food that they promised.

At a higher altitude than the ducks moved a long wavering V of Canada geese, the birds making up the formation gabbling softly to themselves. At irregular intervals the sharp clangor of the confident leader interrupted the soft intonations of the gossipy birds to give assurance to his younger charges. The hatch in the area from which this particular flock originated had been

good so that the percentage of young birds was considerably higher than usual.

Far higher than the geese, in the intense, clear cold above the murk and glimmer of the storm, a great wedge of whistling swans pushed inexorably southward. Even in good flying weather this American swan flies so high as to go unnoticed, its few and infrequent stops adding more mystery to its migration. The soft, yet, far-carrying call of the leader was loyally answered by young and old alike, the resulting chorus mindful of as many off-key French horns. It was a chorus befitting the altitude and space of the solitude in which they traveled.

Other birds were also on the move. Hawks such as the northern duck hawk as well as the equally boreal Arctic goshawk were leaving familiar haunts. Weather meant little to those winged predators so long as

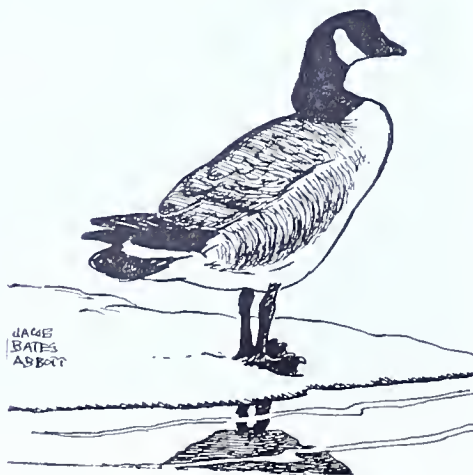
there was an abundant food supply, in this case, furnished by the apparently unending battalions of waterfowl. Indeed, at that very moment in the small segment that our picture depicts, a skyway tragedy was in the making.

An Arctic goshawk moving southward with the general exodus was sailing effortlessly along at a lofty height. Through the gloom below he spied something that caused his fierce eyes to narrow. Suddenly, his wings gave one mighty beat and then half closed and he dropped like a meteor into the smother of the storm belt.

After the hawk leveled off he began closing in on an unsuspecting white-winged scoter drake a little more than a hundred yards ahead of him and moving along at about forty miles an hour. The periodic whistles uttered by the unhurried drake had a distinctly bell-like quality.

As soon as the chunkily built, comparatively slow flying scoter discovered that it had been singled out by the hawk, it immediately went into a steep dive while its wing-beats increased to the point where they made the sturdy wings appear like twin blurs. The drake's heavy body was now hurtling through the snow at more than a mile a minute.

Without any noticeable increase in the even, almost measured tempo of its wing strokes, the goshawk's speed increased to the point where only seconds separated him from the fleeing quarry. The scoter glanced backwards and seeing the winged terror literally on its tail opened its bill to utter a last despairing squawk even as its body dipped more sharply earthward.



The drake never uttered its cry for at that instant it sighted the glint of water and streaked for it in a power dive. The tense stretch of its neck, the parted bill, the distended eyes were all eloquent of the scoter's desperate efforts.

In contrast, the implacable and apparently unhurried goshawk seemed to leap out of its already brilliant velocity as a dozen or so swifter wingbeats drove it forward like a feathered projectile. It overtook the diving drake just as snow-mantled coniferous spires appeared from below. Water was merely yards away when the goshawk struck.

The stooping hawk bit the duck where the outstretched neck joined the body, the former going suddenly limp as the vertebrae snapped under the force of the terrific impact; the blur of the fugitive's wings changing to stiff convulsive beats as the hawk braked its dazzling speed so as to better handle its loot. In minutes the heavily burdened Accipiter found a convenient perch and ravenously devoured his prey. The scoter was but one of thousands of victims which annually sacrifice their lives to the varied winged freebooters of the airlines.

That night when the storm abated, thousands of migrating waterfowl following migration routes along the western edge of the Atlantic flyway came to rest on Lake Erie in the vicinity of Presque Isle as well as on other nearby waters offering safe haven, rest, and food. However, most of the wayfarers living in the same flyway continued eastward and on to the eventual security of the sea.

As a result of freakish weather on the nesting grounds in the fall of 1945, the migration was practically *en masse*. In a normal year the waterfowl filter southward in comparatively small detached flocks scarcely noticeable unless one is on the lookout for just such occurrences.

The fall of 1945 witnessed an unprecedented concentration of whistling swans on Pymatuning Reservoir, the concentration being heaviest on the refuge area fronting Ford Island. At various times during the ten-day stopover it was possible to see at one time an estimated six thousand individual birds, some estimates going as high as ten thousand. Their clamor could be heard in the town of Linesville more than a mile away.

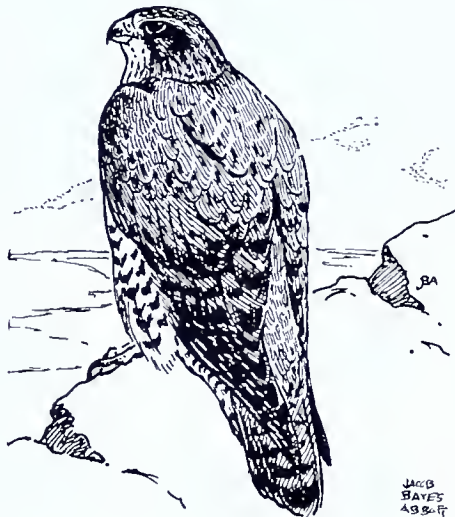
Accompanying or even preceding the heavy influx of swans were Canada geese, pintails, baldpates, northern blacks, and other ducks. That was also the year when large numbers of goshawks and snowy owls left their boreal homes for the comparatively easy living pos-

sible in a more southerly latitude. Unusual numbers of these efficient and fearless predators were seen in the Pymatuning area.

Invariably, the swans move on to their Chesapeake Bay and Currituck Sound retreats where they spend the winter. On the other hand, hundreds of Canada geese and many more ducks winter in the Pymatuning, newly arrived migrants freely consorting with those hatched on the reservoir and environs.

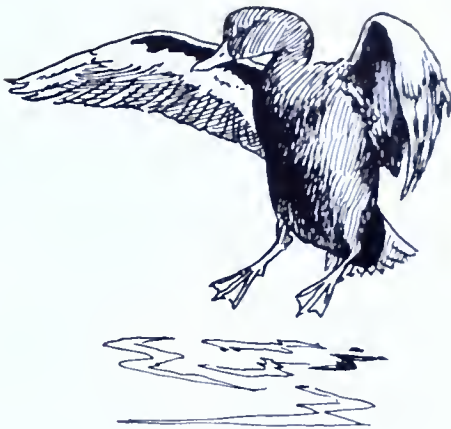
At intervals during the winter many of those remaining over make frequent visits to nearby marshes and fields of winter wheat or even to more distant points such as the Allegheny and other rivers. For the most part, however, they are content to divide their time between the patches of open water which they themselves keep from freezing by constant agitation and readily available food sources. Waterfowl don't go south in the winter to avoid the cold gripping their summer haunts, but for the supply of food that is assured by open water.

Wherever there is a winter population of waterfowl or other birds, for that matter,



there are also the usual predators, both feathered and furred. Furred foes are comparatively unimportant, but several species of hawks and owls as well as the bald eagle may play havoc with these concentrations; many a race between life and death taking place between the more distant feeding areas and the very few spots of open water.

Goshawks and the great snowy owls are the most persistent destroyers, the bald eagles being content with their usual unobtrusive fare unless it is scarce. However, despite its size and strength, an eagle hesitates to attack any but crippled waterfowl. Toward winter's end of last year the eagles wintering at Pymatuning were seen frequenting the vicinity of the open water about a mile off Ford Island, a situation usually occupied by several hundred geese and ducks. Some observers believe that the subsequent abandonment of the spot by the geese was caused by the close proximity of the hungry eagles. Paradoxically, most of the ducks remained. One thing is certain and that is they did not visit the southland as those selfsame observers maintained. For one thing the round trip could not have been made in the three-weeks that they were absent. The most plausible conjecture is that they sojourned at Lake Erie or on one of the rivers.



During the waterfowl gunning season at Pymatuning numerous wounded ducks manage to keep going long enough after being hit to fall within the confines of the refuge. The eagles take high toll of these cripples. While watching the antics of a sizable flock of baldpates resting in the vicinity of Blair Bridge at the southern extremes of the refuge, I spied an eagle winging toward the flock. However, when still a considerable distance away the great bird gracefully wheeled to the right and headed for a weedy lead. A moment later it plunged downward and out of sight behind a fringe of trees. In the few seconds he hove back into view, his pinions beating mightily to gain altitude. A cursory scrutiny with the glasses showed the eagle clutching what looked like a shoveler. Along that same area on the previous day refuge manager Ray Sickles accompanied by warden Eugene Maxwell, Washington state guest student at the Ross Leffler School, picked up several dead ducks just inside the wire. On the day following my observation three eagles were seen working the vicinity.

Last June, a farmer living at the edge of that long strip of swamp country between Hartstown and Blair Bridge spied a strange fowl consorting with his flock of domestics feeding in the miry lower pasture. The big white bird with the ebony wing tips proved to be a snow goose. But why it was there instead of with its kindred in the watery Arctic wastes could be explained only by the bird itself. "It was a sociable critter," the farmer explained as a smile bespread his face, "but he wouldn't talk." Guesses and opinions of the many who saw the goose were numerous and varied, the most likely being that the gander had lost his mate in the vicinity and hopefully remained there waiting for her to rejoin him. This fall he winged off with others of his kind, the call of the southbound flocks being irresistible.

Swans as well as geese have the admirable trait of faithfulness developed to a high degree, mating for life and remaining faithful to each other *even unto death*. Indeed, the claim is made that should one of a pair die the survivor foregoes the taking of a mate for several years. We can't vouch for the authority of this truly admirable manifestation, but it is mentioned to sort of condition you for one of the most unusual nature observations that has ever come to my attention. That its authenticity is impeccable

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JACOB
BATES
1950-71



THE SPORTSMAN-- BOTTLENECK TO BETTER HUNTING AND FISHING

By ROGER M. LATHAM

NOTE—"This is a significant article which should be welcomed by all intelligent sportsmen"

COLONEL NICHOLAS BIDDLE
Chairman Public Relations Committee
Member Pennsylvania Game Commission

DO you remember the song "I'm my own Grandpa"? We could change the lyrics a little and come up with one for Sportsmen—"I'm my own worst enemy!" Most hunters and fishermen who read this are going to be shocked and perhaps hurt when they find out that conservation leaders throughout the country consider them one of the most important, if not *the* most important, stumbling blocks in the way of better hunting and fishing. In fact, some of these sportsmen have practically dedicated their lives to fighting against the very things that they think they are fighting for. Sounds like double talk, doesn't it? But it isn't double talk; it's sad truth.

Within the past twenty years, sportsmen's clubs have sprung up all over the country, and they have become affiliated and fed-

erated to such an extent that they can now exert considerable pressure upon state conservation departments. In some states, they have become so powerful that the more important policies and key personnel of the conservation departments must meet with the approval of the organized sportsmen. What has been the result of this new power and this "cooperative" interference upon the part of hunters and fishermen? It has meant a change, in many cases, from scientific game and fish management to non-scientific management based upon selfish desires, political propwash, unproven lay ideas, and oftentimes wild guesses.

Many of the resolutions adopted by sportsmen's groups are preposterous. A large club in one of the eastern states passed a resolution and sent it to the conservation commission suggesting that the commission erect a two-foot woven wire fence along all main highways in the state as a means of reducing highway mortality of cottontail rabbits. This state has 41,000 miles of paved highways. In order to erect the fence as suggested, the department would have had

to spend all of its income for several years, and probably the repair bill alone would have kept it in the red until the project was finally abandoned. And of course, it is obvious that it would have been next to impossible to carry out the idea anyway, since many, many opening for farm lanes and other entrances would nullify its value.

This is just one resolution but typical of many thousands like it (some are even more unreasonable) which the sportsmen in all sincerity submit as management plans to improve their sport. Nearly every sportsman seems to have some pet idea of his own which he believes to be a panacea for all conservation ills. And, almost any member of a club who is well-liked and respected can get sufficient backing to pass his suggested resolution. Thus, they continue to pour in, from individuals, from small clubs, from county and state federations of clubs, and even from national organizations

What do the trained wildlife leaders think

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OUTDOOR KIDS

By HAL HARRISON

BILLY and Jane and their English setter, Pal, were sitting in the backyard late one September afternoon waiting to be called to dinner. Their mother had warned them not to wander far away for she had had some discouraging experiences hunting these youngsters at mealtime.

"Jane, let's take a hike over to the marsh tomorrow and see"

Billy's voice trailed off and he never finished the sentence.

Jane looked up from her pastime of scratching letters in the dirt with her shoe to see why Billy had suddenly become quiet.

He was staring at her left shoulder.

"Turn your head slowly and see what is on your shoulder," Billy said to his sister, half whispering and never taking his eyes from the spot to which he referred.

Jane turned slowly.

"Holy smokes, what is it?" she cried as she saw a thin brown creature with six legs resting quietly a few inches from her face.

"It's a walking stick, Jane, and it is the only one I have seen all summer. Hold still and I'll catch it so you can see it."

Billy grabbed the insect and it struggled between his fingers, all six legs moving like oars in a boat, the two antennae twitching from side to side. The body was very thin but was about four inches long.

"Gee, it's easy to see why it's called a stick, eh Billy,"

exclaimed Jane as she watched the legs from the twig-like body paddling the air.

"I'll say, and these things might be very common around here and still we would never see them. That is certainly a good example of protective coloration and a protective shape too," Billy declared.

"What do you mean by that?" Jane asked.

"Well, do you see how much it looks like a twig. It's shaped like one and it's colored like one. A hungry animal seeing a walking stick lying motionless would probably never suspect that it was alive. That fact has saved the lives of thousands of walking sticks I'll bet you," her brother explained.

"I get it, Billy. It's the same idea as a katydid looking just like a green leaf, isn't it?" Jane countered.

"Yes, and the same idea as a whip-poor-will looking just like the dead leaves as it sits on its eggs; or the hummingbird's nest looking just like a knot on the limb of a tree; or a bittern freezing with its neck held high to look like dead cattails," Billy continued.

"This walking stick reminds me of a praying mantis," Jane declared.

"Oh, no, Jane. Why a praying mantis has wings and a walking stick has none. And the mantis has two big front legs that it holds high," her brother answered somewhat irked at Jane's mistake.

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FOXHUNTING IN PENNSYLVANIA



BY EVELYN RITTASE

William M. Rittase Photo

FOXHUNTING, I am told, is a controversial subject in Pennsylvania. I think most subjects are anywhere. That is something which makes Americans interesting people. We are still rugged individualists—at least most of us. We are ready to defend our beliefs and have the strength of our convictions. Foxhunting is one of America's oldest sports and being one of its devotees, I like to enter the controversy.

Our world is changing fast enough yet there is much in the past that is colorful and romantic and gracious. I think the hunt is one of those traditions that will pass soon enough as the countryside becomes more thickly populated. I love to hear the baying of the hounds ringing lustily on the crisp morning air. As we pause to listen for their singing, even the horses are tense with excitement and paw the ground with impatience to be on with the chase. To clear even a low fence in full pursuit or thread one's way down a woody slope is not for the novice rider.

Foxhunting is as American as maple syrup and flapjacks, cornbread and fried chicken and older than the Liberty Bell. By 1781 former British colonists, after defeating Cornwallis at Yorktown, began hunting as Americans but hunting the fox with hounds did not become popular in America for about three decades after it was current sport in England. Van Urk in his "Story of

American Foxhunting" cites the dates of 1666, 1690, and 1698 when packs of hounds were maintained in England for hunting the fox exclusively. While the earliest references to foxhunting in Virginia date from the end of the 17th century, John Clayton, botanist and clerk of Gloucester, Virginia, wrote in 1688—"Every house keeps three or four mongrel dogs to destroy vermin, such as wolves, foxes, etc." Horses were imported for the chase in 1691.

At the time game was so abundant that colonists could hunt with every means at their disposal without affecting the supply. Bounties were soon offered for predatory animals including wolves, wild-cats, panthers and foxes in 1714 in New Jersey and 1723 in New York. Seventeenth century statutes reveal government determination to exterminate wolves as "predaceous to domestic livestock." Virginians living in the upland forest chased wolves on horseback as sport. As wolves disappeared, the fox was the next best available quarry. In 1739, John Clayton, author of "Flora Virginica" wrote to England, "to satisfy the gentleman who is desirous of knowing the diversion of hunting and shooting here, tell him we have all the variety of the wild ones as deer in great plenty, bears, raccons, oppossums, beavers, otters, muskrats, polecats, minks, etc. Some hunt foxes with hounds as you do in England." It can be imagined what

a sportsmen's paradise this continent was. The game hunted with dogs alone was as abundant as that hunted with guns.

That the fox was able to survive and his breed remain so numerous through the years is tribute to his intelligence and sagacity. I believe every known method of extermination has been used upon this little animal. Van Urk says that when printing came to England one book very bluntly publicised the existing feeling toward Reynard when it said, "Do not stand on quilllets how to slay him." He was regarded as the worst vermin and the dastardly treatment meted out to him may have had something to do with his becoming a felon. In order to exist he had to resort to subtlety and cunning almost out of the animal world.

The new breed of sportsman—the fox-hunter—glorified the fox, recognizing that it was no ordinary beast. At least some rules were instituted that resembled fair play.

Weighing the odds against him, the fox has speed comparable to the greyhound and craftiness and courage against the reckless abandon of a pack of noisy hounds. Hounds have only one sense of smell to guide them against which the fox pits that and keen sight and hearing and protective coloring. Soil in the pads of the fox's paws obscure scent from the dogs. He is only engaged during the colder months of the year. The

fox, in a military sense, has become liaison officer between horse and hound, commanding respect and admiration. His coadjutor, the foxhunter, believes that his death in front of the hounds is like that of a soldier falling in battle and any other meted out to him is a social crime.

That the fox does claim respect is evidenced by the saying "wise as a fox" and his smartness is further proven in that he has adapted himself to the habits of mankind in order to escape extinction.

The fox's initiative is evinced by his manner of ridding himself of fleas. "Taking in his mouth a tuft of wool or a piece of wood, a fox will slowly sink himself, tail first, into a pond and thus gradually drive the fleas forward until the last refuge is the wool or wood, on the surface of the water. The fox then sets this adrift teeming with the parasites and keeping clear of it, lands on the bank and makes off." This information comes from the Natural History Editor of *The Field*.

That the fox is accustomed to going into the water is proven many times by his plunging into a stream to throw the dogs off his scent. After the pack has gone, the wary animal has been seen to emerge where he entered, not crossing at all or he will swim downstream aways. To paraphrase John Masefield—We can outlast horse and out "chase" hound, but men are "devils from Lob's Pound." Hunting keeps the fox mentally alert and physically fit. Animals generally tend to grow soft and dull in captivity and easy living.

Red foxes were exported from America to England in 1843. They were probably

here before the Indians in North America and all parts of the United States. From 1915 to 1929 there was a bounty of \$2.00 on red foxes, and from July 1, 1940 to March 31, 1942 a \$4.00 bounty. The \$4.00 bounty was resumed on July 16, 1945 and was only recently removed. A law was passed in 1913 prohibiting the killing of foxes in Delaware County, by shooting, snares, trapping and poisoning, except when caught in the act of destroying property. This law was amended in 1919 to extend its provisions to Chester County.

I have heard hunters blame foxes dropped for a hunt and not caught for preying on game. There were foxes and mink and rabbits and pheasants in abundance before man upset nature's balance. The dog and cat and rat have followed man everywhere, living by him as well as with him. In years past the dog served man more and was less of a pet than he is today. I know too many people who keep dogs just to have them and they serve no real purpose. From day to day and at night, they roam the countryside living on game and even stealing chickens, for which the fox gets the

blame. Everyone who has sheep, and I do, knows the revolting sight of a mutilated lamb. The dog cannot be brighter than the person who trained him—or did not bother to, but the poor beast must take the blame and perhaps a few bullets for that lack of training and restraining. In Pennsylvania, though, the owner must pay the fine and damage costs for letting his dog run at large.

The cat is even a greater menace, because it stalks its prey. For years I have seen our farmer's cats bring birds and small rabbits to our barn, while the rats and mice grew fat on our grain. Now I have more song birds in the bird-houses I put up and fewer rodents, controlling them with traps and poison carefully placed—and no cats. I have had hunters tell me they always shot cats in the fields and woods.

The hunts with which I have ridden have shown every consideration for the farmers over whose land we travel, skirting the edge of wheat fields, avoiding lawns and calling the dogs away from livestock. These things are in the interest of the sport, making friends instead of enemies. All of these hunts are liable for damage to personal property and legitimate claims are quickly paid.

Civilization is pushing back the fox and all wild creatures at a faster rate than we think. Our Game Commission is fighting to stem this tide with programs of stocking and establishing breeding grounds. Man and not nature has created this situation. I think the fox had very little to do with it, so I suggest that we leave the little fellow to amuse the hounds, unless he destroys personal property.



William M. Rittase Photo



Near a salt block which I had placed in a field of timothy there abounded quite a rabbit population. While I sat under an apple tree to observe the actions of the rabbits at the salt in June, several of a litter of small bunnies approached me and began to nibble at my shoe laces. I placed a hand on the grass, palm up, and presently two very small rabbits sat in my hand and licked perspiration from it. A slight movement of a foot, however, sent them scurrying into the deep grass from which they never emerged again.—Game Protector Clarence F. Walker, District C-17, Beavertown.

On Memorial Day I was passing through Bloomsburg about 8 o'clock in the morning and when I reached Main Street about one half block above the court house, I saw a very large weasel crossing the street in front of the car. He seemed to be in no hurry so I immediately stopped and took off after Mr. Weasel. He was then perched upon the sidewalk just a few doors from the Department of Forests and Waters office. At this point I realized that maybe I had better have some sort of weapon so I turned to go back to the car for a tire iron. But, suddenly, the weasel decided to make his exit and he speedily slipped into a partly open doorway and ran up the steps to the apartments located above the Dean-Phipps Store. Not wanting to disturb the late sleepers, I proceeded on my way but have been wondering ever since if anyone captured or killed that weasel taking refuge on the second floor of a busy store and apartment house.—Glenn W. Steward, Berwick.



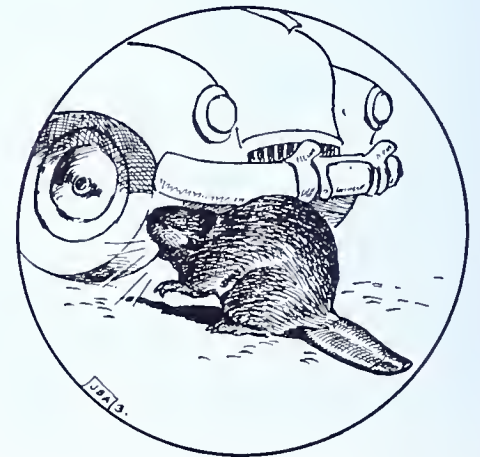
On June 30 I received a telephone call from the Montgomery County police radio station at Norristown that Conshohocken police had received two reports of bear running at large in Conshohocken and Upper Merion Townships. They stated that the bear had been in Conshohocken within the last two hours and requested that I meet their car as soon as possible. I went at once to Conshohocken and we checked the report with one of the local officers who had seen the bear. This took place at 1:30 a.m. but a two hour check failed to show any signs of the bear. I also had a call in June from the Pennsylvania State Police at Collegeville reporting that they, also, had received a complaint of a bear along the creek just south of Collegeville at the start of Mile Long Hill. One of the persons reporting this bear was a professor at the University of Pennsylvania.—Game Protector George W. Freas, District A-22, Horsham.

There are many ways in which game is killed accidentally but late in June I heard of a new one. A farmer near Dover said that while riding in his truck, he noticed a very unpleasant odor which seemed to come from the motor. He investigated and found that a ringneck pheasant had jumped under the hood from below and was stuck between the motor and manifold where it was slowly being roasted.—Game Protector Earl E. Geesaman, District A-17, York.

Received a report in June of a farmer mowing into a turkey hen on a nest in his hay field. The field was approximately one half mile from the mountains. The unfortunate feature of this accident was the fact that the turkey had both legs cut off but flew away to a painful death. Also, the man that was doing the mowing did not report the incident to his employer until late that night and the next morning they found predation had accounted for the eggs. I think this is unusual to find a turkey nesting in a fairly settled agricultural section.—Game Protector Clyde E. Laubach, District C-19, Elysburg.

Nineteen rabbits, two deer and a grouse are known to have been killed on the highways in my district during the month of June. The Commission did not stock any rabbits in the district this past winter due to conditions beyond their control, yet I can safely state that we have more rabbits in the area now than we had at the same time last year.—Game Protector John Spencer, District B-14, Orwigsburg.

On Sunday, June 26, a car loaded with sightseers came around a bend in the road to find a large beaver parked in the center of the highway. The animal refused to budge so the driver stopped the car. As soon as the car stopped rolling, the beaver rushed up and started chewing on a front tire. Deciding that tires cost too much to use as teething rings for beaver, the owner picked up a club to give battle, only to find himself under attack. He made a hasty retreat up the road. When the beaver found that it could not catch the man, he took a bite out of a large stone (at least, tried too), made a couple of passes at a tree, and then started to work out on the other front tire of the auto. By this time the occupants of the car were convinced that the animal was suffering from rabies. A larger club was secured and after quite a battle the animal was killed. It was the next day before I picked up the carcass and by that time it was too ripe and flyblown to send away for a rabies examination. I've had a few reports of rabies in foxes but this is the first on a mad beaver.—Game Protector Duane E. Lettie, District B-10, Honesdale.





A killdeer has its nest in the center of the Corry Rod & Gun Club Skeet Range. When the boys go down to shoot, she will fly off and keep flying around among the targets while they are shooting. Just why this bird has not been killed is beyond me since often when the targets are in flight the old bird will fly at them. She also follows the target but has an act of turning just as the target is shot at.—Game Protector Jim Latimer, District F-4, Corry.

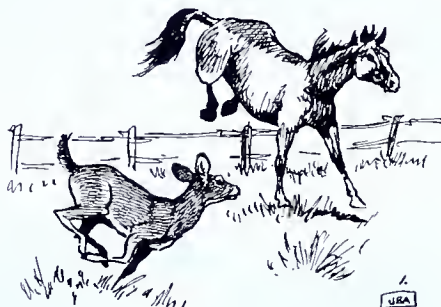
On June 15 I received a telephone call from Mr. Skinner of Academy Corners, asking for permission to kill a deer. He stated that the deer had caught itself in a fence and couldn't get away. Upon investigation I found the deer—a large buck—hanging on a steel fence post. The post was made of an inch and a quarter angle iron and was about four feet high. Mr. Skinner said that there were two deer together feeding along the B. & O. railroad. The whistle of an approaching train had evidently frightened them and one deer became confused. He saw it stumble, then lost sight of it, and, later, when he went to investigate the incident, he found the deer hanging from the post. It had hit with such force as to drive the post through its stomach and through its backbone, partially breaking the skin on the deer's back between its hips. I found one front leg broken; this may have been the cause of the deer misjudging the distance and landing on the post.—Game Protector Gerald W. Cyphert, District C-1, Westfield.

On June 16 I met Pious Kutz, a Farm Game Cooperator on Project No. 17 near Kutztown. Mr. Kutz was mowing a grass field with a team of horses and he told me that to date he had found 12 pheasant nests while mowing. In one field all the eggs had hatched while in other fields where he located the nests, he made every effort to leave some grass stand around the nest. However, in every instance the crows drove off the hen and ate the eggs. One nest, he stated, was within 50 yards of his buildings and he drove off the crows each time they attempted to raid the nest. However, the next morning when he arose, he noticed that the crows had managed to drive the hen away and were in the act of eating the eggs.

On June 10 Game Protector Wallace Woodring, Ephrata, and I walked into a woodlot in upper Lancaster County for some crow shooting. While looking for an opening from which to shoot, I walked into

what looked like an active fox den. Remains of rabbits, chickens, and pheasants were in evidence wherever you looked. Mr. Woodring remained standing at a spot where he could see to the den while I walked about 30 yards to the other side of a thicket and gave the distress call of a young crow. On the fourth call a large male gray fox ran toward me looking for the young crow which would have provided a fine meal. However, I gave him the benefit of a load of shot instead. The fox weighed 13¾ pounds and his stomach contained a litter of young rabbits which he had taken from a nest.—Land Utilization Assistant Albert R. Bachman, Reading.

In a conversation with Howard Karshner, Wyalusing, he related an incident which he had witnessed recently. While driving through Wilmot one day, he noticed a horse in a field running along a fence row. On the other side of the fence row, he noticed another animal running in the same general direction of the horse. At first he thought it was a dog but as it came nearer, he watched it jump over a wire fence and to his surprise it turned out to be a doe deer. The deer jumped the fence and took out right after the horse. When both animals came within a few rods of the barn, the deer stopped running and took off through the pasture field into a woodlot. Apparently, the deer was warding off the horse in the possibility she had a fawn in the area.—Game Protector Nobert J. Molski, District C-4, Wyalusing.

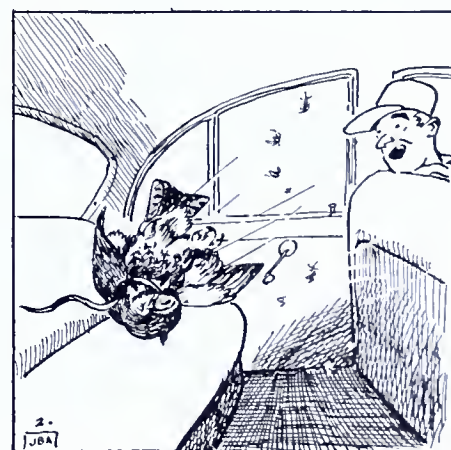


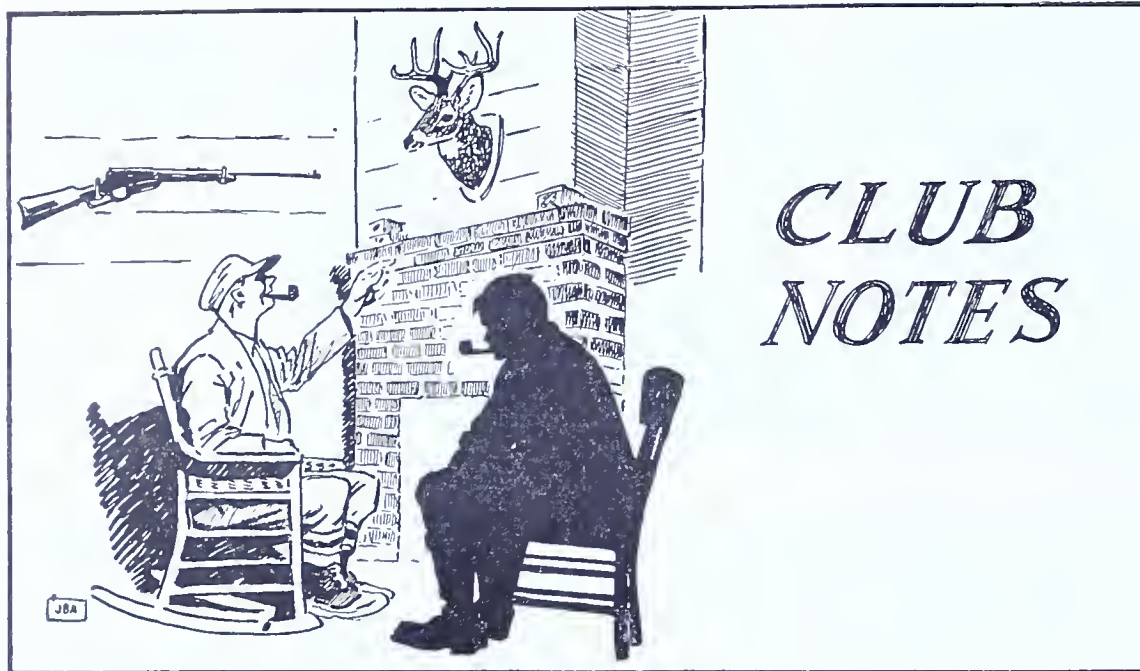
On June 14 about 9:00 p.m. some boys stopped their car at my headquarters and informed me that they had a young fawn in the car which they picked up on the highway while returning from a swimming party. They stated that they had hit the deer with their car. Upon examining the fawn and watching its actions, I informed the boys that we would have to return it to the spot where it had been picked up. After we had taken it back along the road and had released it in the woods off the highway, I was surprised to see it follow us back out to the road again because I did not think it was in our possession long enough for it to become attached to us. However, it did not stop when we did but continued on up the road about a hundred yards, then cut off the road on the opposite side from the one where we had placed it and continued on out of sight. Evidently it knew where to go to find its mother, which is more than we knew, and it was only a small spotted fawn.—Game Protector Ted Schafer, District B-6, Conyngham.

The Conodoguinet at the point at which I was fishing for bass on the Fourth of July is approximately 80 yards wide. As I made a cast downstream, my attention was attracted toward the south bank by the light "splash" of an object entering the water. At first I thought it was a huge fish carrying something in its mouth. As the object continued its swimming advance toward me, however, I recognized the gray and brown head of a groundhog. He swam directly for the opposite shore, never wavering from his intended course even though it happened to lead just a few feet behind me. As Mr. Whistle-Pig climbed out of the water to the shore, I had a good look at him and was sure of my identification. He stopped just about a half minute, evidently to get his breath after the long swim, then climbed the bank and disappeared into a nice garden of growing beans, corn, cabbage and other vegetables. So there you have it: A woodchuck willing to swim the full width of a wide creek to reach the vegetarian delicacies of a new garden.—Chas. F. Stambaugh, Harrisburg office.

On June 7 Game Protection Bill Lane and I went to State Game Lands No. 99 to feed the turkeys in the propagation area and observe the nesting birds. We started to circle the area inside the wire but about half way around, we saw a rattlesnake inside the enclosure. After killing it, examination of the stomach contents disclosed a grey squirrel that the snake had eaten. All of it was intact except the head and shoulders which were already digested.—Game Protector John Hiller, District D-11, Saxton.

About dusk one evening in June Mr. Robert Dunn of Albion was driving his car, a coupe, through the streets of Albion. He was traveling about thirty miles an hour. Both windows of the car were open. He was rather startled to hear something strike the inside of the car and at his next stop he looked back to see a screech owl with a dead garter snake about a foot long in its mouth. The owl had come through the open window opposite the driver and had hit the side of the car with such force that it was killed. The snake was probably dead beforehand. The amazing thing about this incident is the perfect timing displayed. A bird flying through the air with its supper in its mouth, hitting the open window of a car travelling about thirty miles an hour—well, it's hard to believe, but it's a true story.—Game Protector Clair W. Dinger, District F-1, Albion.





Delaware County Field and Stream Association

The Youth Educational Committee of the Delaware County Field and Stream Association recently concluded a contest among its Junior members and the results were tops. The contest was started last fall with registration and written consent from the boys' parents for them to participate for the prizes. Points were given for making bird houses, working on the club's pheasant pens, application for rabbit traps, trapping rabbits, trapping or killing predators, returning rabbit traps promptly after the close of the trapping season, attending the school of instruction on game and game laws, and, finally, a written examination covering questions that had been discussed in either the fish or game classes, and an essay on conservation and one on sportsmanship. Conservation, good sportsmanship, and the safe handling of firearms were stressed throughout the classes at every opportunity.

The boys trapped fifty-four rabbits which were paid for by the Game Commission. The committee also paid the boys for ten opossums which were also live-trapped. Hawks and owls were not included in the predator control contest because so many species of them are protected but crows, water snakes and snapper turtles were among the point winners.

Westley Simmons, of Sharon Hill, scored the most points to win a ten-day trip to the Conservation Camp at Stone Valley. Jimmy Goodyear, James Smith, and Manfred Haiges won a trip to Thurmont, Maryland, to attend the camp sponsored by the Brotherhood of the Jungle Cock. The next six prize-winners—Edward Cape, John Turner, Edward Reading, John Tomlinson, Roger Ruth, and George Grosser—one a one-day tuna fishing trip from Ocean City, New Jersey, sponsored by member Capt. C. E. Lent. The other two boys on the winning list—Bill Tomlinson and Larry Frances—were awarded a rod and reel and were taken on a fresh water fishing trip by the Club's past president, Harry Sauers, and Jack Meehla, Chairman of the Game Committee. The Delaware County Association is currently headed by L. F. (Shorty) Manning.

Consolidated Sportsmen of Lycoming County

The big two-day annual picnic of the Consolidated Sportsmen of Lycoming County was held on July 27 and 30 at the Sportsmen's Memorial Grounds along the Loyalsock. Under the chairmanship of C. M. (Lefty) Kehler, some 300 committee members staged top notch sports events including trap and skeet shoots, pistol and small bore rifle matches, running deer and bear on the mountain novelty shoots, fly and bait casting events, archery contests, and other recreational features. The Lycoming County organization set as its goal for the pheasant propagation program 3,000 birds in 1949.

Northcentral Division

The annual field day, basket picnic and quarterly meeting of the Northcentral Division of the Pennsylvania Federation of Sportsmen's Clubs was held on the St. Mary's Sportsmen's club's grounds near Glen Hazel in Elk County.

Two hundred and fifty sportsmen and their families from Cameron, Clearfield, Elk, Jefferson, McKean and Potter Counties enjoyed the event.

Under the leadership of President Ed Brasseur, DuBois, this division has forged to fifth place among the eight Pennsylvania divisions of the federation, although it is by far the smallest in both population and area.

The membership includes 65 individual clubs, representing 18,137 paid members, which is more than double the membership of this division just one year ago.

Events for the field day included races for boys, girls, men and women. A tug of war between members of the Elk County club and the Clearfield county club was a highlight.

Much of the afternoon was taken up with the quarterly meeting of the Division. Seventeen of the 26 boys sent from this Division to the Junior Conservation Camp were questioned by Committee Chairman Ralph Thomas. Their reports were enthusiastic. These boys will head Junior Sportsmen's Clubs in their own communities this year.

Among the speakers at the meeting were Game Commissioner H. E. Kilgus; the Game Commission's Division Supervisor, M. E. Sherman; and Hon. Edwin Tompkins, Cameron County representative in the Legislature.



Hal Harrison Photo

Northcentral Division officials take time out from business to enjoy some sport on the firing line at the annual field day in St. Mary's. They are, left to right: Ed Brasseur, Division president; Ralph Sherwood, Elk County delegate; R. D. Tittenhouse, Elk County league chairman; H. E. DuBroux, Division secretary; and A. L. Lenze, president of the St. Mary's club.

SPORTSMAN—BOTTLENECK TO BETTER HUNTING—from Page 19

of all this? *They think that American sportsmen have more ego than any other similar group of people in the world.* What other group comprising so many millions of men could boast that every member is an expert in the particular field of interest? Where else would you find untrained men with sufficient egoism to tell others with years of academic and practical training in their field how to run their business? Do these hunters and fishermen stop to tell engineers how to build highways and bridges? Do they tell their doctors that they don't have appendicitis but that it's gall stones instead? Do they tell their dentists that a tooth doesn't need to be filled just because he says it does? Do they argue and disagree with chemists, pharmacists, architects, lawyers, or even expert tradesmen such as carpenters, mechanics, plumbers, and electricians? No, because they realize that these men have had years of training and experience which qualify them to do their job well. These hunters and fishermen also realize that they, themselves, have had little or no training in these fields and therefore are not qualified to criticize or suggest.

And yet, without any training whatsoever in the field of wildlife management, these same hunters and fishermen set themselves up as experts to criticize and damn and fight the efforts of professionally trained wildlife men all over the country. Most of the wildlife leaders, the technicians, and the research workers have had six to eight years of college work the same as engineers, doctors, lawyers, and dentists. *Why a layman will place his life in the hands of his doctor with complete confidence, and not even trust his sport in the hands of another man with a similar amount of professional training is difficult to understand.* It certainly can-

not be because the wildlife men are not sincere in their efforts, because there are no workers who try any harder to accomplish their goal than these men. Like most scientists, they devote long hours to their work in the laboratory; they endure hardships in the far North studying waterfowl; they push through dangerous swamps in Florida and Georgia; they tramp for miles in winter on snowshoes to study game; and they burn plenty of midnight oil reading to keep abreast of the new developments in the field. These men are true scientists as much as those in medicine, chemistry, physics, or engineering, but they have to work under the severe handicap of knowing that many of the people for whom they work have little respect or confidence in their ability. It is their love for the out-of-doors and their conviction that they are aiding in the restoration of wildlife and the betterment of hunting and fishing that keeps these men on the job. Certainly it is not the monetary reward nor the gratification in knowing that the sportsmen are appreciative of their efforts.

What are some of the ways hunters and fishermen are hurting their own sport? There are an endless number of examples of their shortsightedness and stubbornness, but one or two will suffice to illustrate the point.

It should be understood, first of all, that reference will be made here only to those activities of sportsmen as pressure groups—their attempts to interfere with sound, scientific as well as common sense management of wildlife. The fact that many hunters and fishermen break the conservation laws and thus adversely affect their own sport and that of others is another story. Taking more than the legal limit, hunting or fishing out of season, jacklighting, shooting hen ring-

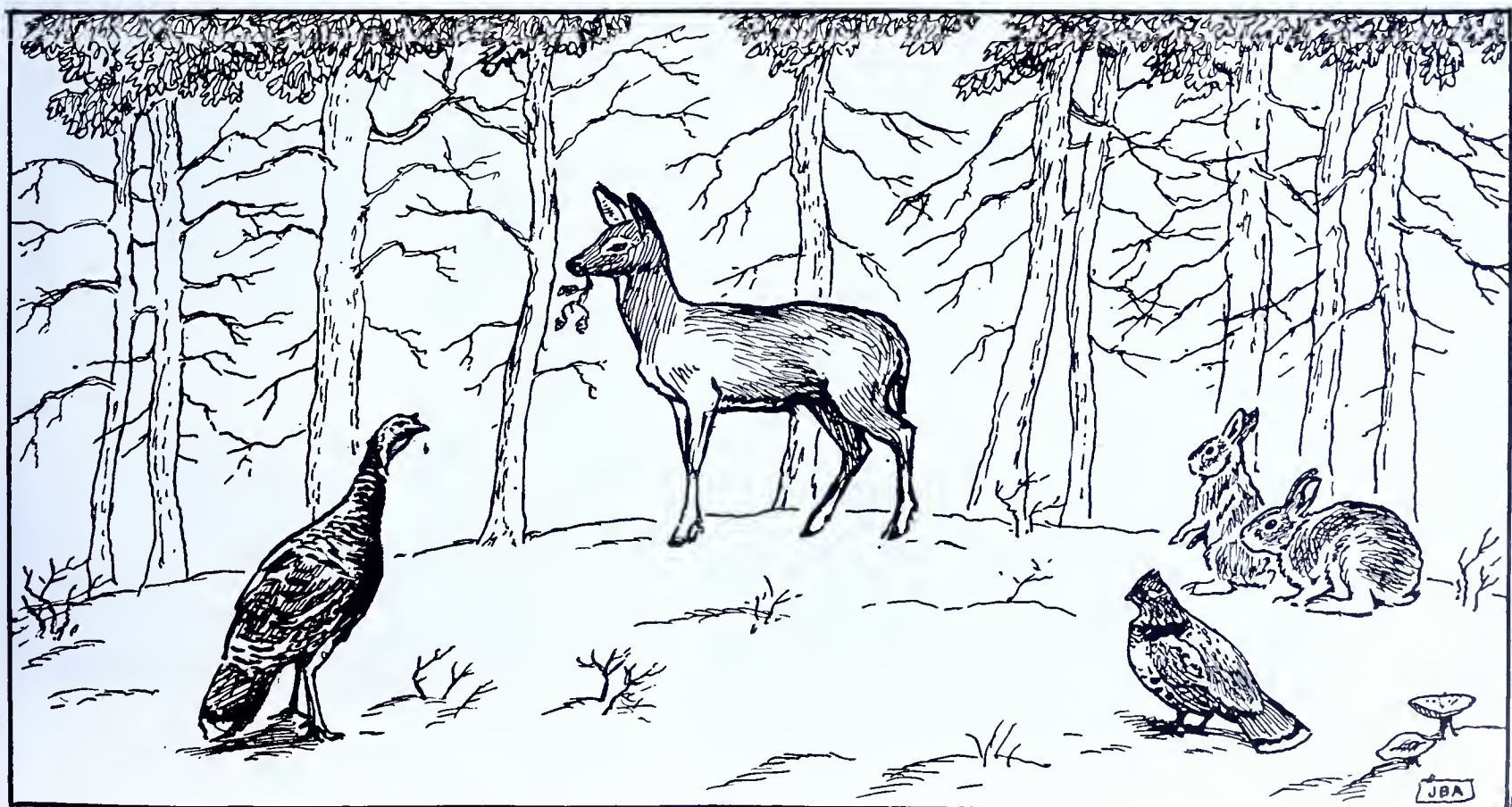
necks where forbidden, and all the other forms of violation reduce the numbers of game animals and fish that could have provided additional recreation for all sportsmen. *It is significant and true that many of the most severe critics of the work and policies of conservation departments are the most flagrant violators of the game and fish laws.*

But here are just a couple of ways in which the well-meaning, but untrained and uninformed, sportsmen are defeating their own purpose!

Everyone has heard of the *deer problem* which is probably the greatest simple management headache that wildlife men have to face in the nation today. This problem is acute if not chronic in many states at present, and promises to become serious in many others in the near future. But it is a misnomer to call it a deer problem, because it is actually a *hunter problem*. It is difficult to imagine, in this day and age of great demand, a game species becoming so abundant that its mere abundance presents difficulties. However, that is the one and only problem; *there are just too many deer!* Management sounds simple, and would be simple, but the hunters of most states where deer are overly abundant will not agree to permit the conservation departments to manage the herds scientifically and sensibly in many cases. They object to shooting does, and because only the bucks are harvested year after year, the herds increase beyond all reasonable proportions.

Here in a nutshell is why it doesn't pay to permit deer to become over-abundant. First, when deer become too numerous they so deplete the browse supply in the forests that there is insufficient food of the proper quality to support this large number in a normal, healthful condition. A depleted food supply results in the following abnormalities: (1) reduced body size and antler growth;

(Continued on Page 24)





Missouri Cover Restoration Program Producing Results

During the past year, 3½ million multiflora rose plants were produced and distributed by the Missouri Conservation Commission, according to the Wildlife Management Institute. E. B. Biffle, the Commission's cover-restoration project leader, reports that a production goal double this amount has been set for the coming year.

Working closely with the county agricultural extension agents, Soil Conservation Service, and sportsmen's groups, the Commission is obtaining full cooperation from the landowners in restoring wildlife cover in Missouri. A primary goal, the distribution of multiflora rose at a credit rate of \$6.00 per 1,000 plants, already has been attained. Before the end of next summer, the Commission hopes to have at least three or four demonstration areas set up in each county of the state.

Reprints Available of "Handlin' a Gun"

A copy of "Handlin' A Gun" published in this issue of Game News, approximately 17 by 23 inches, suitable for framing or club room use is being mailed to every sportsmen's organization in Pennsylvania with the compliments of the Game Commission. An additional copy may be obtained by individuals or organizations by remitting the cost of mailing—ten cents in stamps—for each copy desired. Coins, checks, or money orders will not be accepted. Forward all requests and stamps to the Pennsylvania Game Commission, Division of Conservation Education, Harrisburg, Pa.

How Long Is "A Coon's Age"?

The old expression "in a coon's age" has taken on more exact meaning with the completion of an age-determination study by Glen C. Sanderson, a graduate student at the Missouri Cooperative Wildlife Research Unit, according to the Wildlife Management Institute.

In live male raccoons, or in cases where dissection is impractical, 90 per cent accuracy may be achieved by weight alone, Sanderson found. Those weighing 15 pounds or more may be considered adults, while those under this weight, nine times out of ten, are young. A completely accurate method consists of examination of the *os baculum*, a peculiar bone structure in the reproductive organ of the male raccoon. If cartilage is present on this bone, the animal is young and, if absent, the specimen is an adult.



Uniontown Evening Standard Photo

Robert S. Cooper, Connellsville, president of the Pennsylvania Federation of Sportsmen's Clubs, recently was commissioned Deputy Game Protector at appropriate ceremonies held in the Fayette Gun Club headquarters, Uniontown. George Norris, acting Supervisor of the Game Commission's Wildlife Conservation Division "G" is shown making the deputy badge presentation while representatives from the Commission and club look on.

Citizens' Association Licks Watershed Problem

Most people regard pollution and erosion as problems that can be handled only through state or federal action. The citizens of the Brandywine Creek watershed in Pennsylvania and Delaware, however, felt differently and, in doing so, produced one of the most amazing examples of non-governmental civic achievement to come to the attention of the Wildlife Management Institute.

Like many others, the Brandywine was a sick stream three years ago. Potentially a thing of beauty and great recreational value, it was laden with silt, sewage, and factory wastes. Unsightly dumps littered its banks. Unwise farming practices were depleting the topsoil and outdated forestry practices were adding to the annual silt load, which had reached the astounding total of 1,400,000 tons by 1946.

Under the leadership of Edmund duPont, president, and Clayton M. Hoff, vice-president, the Brandywine Valley Association was formed in 1946 to check such abuses in the 300-square-mile area. At a meeting of community leaders a plan of action was drawn, and work on attacking major problems began at once. There was no coercion. Soil conservation and forestry experts were called in to help farmers reduce the loss of topsoil and the resultant silt load of the stream. Industries and municipalities cooperated wholeheartedly by installing waste disposal plants. Clean-up crews went to work on the stream-side dumps. Flood damage has been alleviated, new industries have been attracted to the area, and crop production has increased.

Much of the credit for the establishment of the Association and for its accomplishments can be traced to the widespread educational campaign carried on by the founding officers. Numerous colored photographic slides were made of the stream and watershed to show flagrant abuses. These were used to illustrate forceful lectures, which were presented before hundreds of meetings. The approach did much to stimulate voluntary action and to crystalize public opinion.

Here is a project which organized sportsmen in almost any community could undertake to good advantage. It takes imagination, cooperation, salesmanship, and hard work, but the accomplishments of the Brandywine Valley Association show what can be done in a short time when leadership is furnished. Take a long, hard look at your own Brandywine Creek.

THINGS YOU MAY NOT KNOW

Bears are near-sighted because of their long-time habit of feeding with noses to the ground. Their keen senses of hearing and smell make up for this deficiency.

To perform a work equal to that of a mole, a man, in size comparison, would have to dig a tunnel wide enough to permit the passage of his body and thirty-seven miles long, in a single night.

Lions no longer exist in South Africa.

Transactions of the Commission's Meeting, July 1, 1949

Establishment of the 1949 hunting seasons and bag limits, previously announced in *GAME NEWS*, highlighted the regular quarterly meeting of the Pennsylvania Game Commission on July first in Harrisburg. In addition the Commission took action on the following matters of interest to the sportsmen of the Commonwealth:

Instruction Meetings for Deputy Game Protectors

Approval was given to a plan for meetings throughout the State at advantageous points for the purpose of giving instructions to Deputy Game Protectors. Travel and subsistence expenses incurred by the Deputies are to be paid by the Commission.

Wildlife Exhibits

The Commission approved wildlife exhibits at the Allegheny County Free Fair, Pennsylvania State Farm Show, and the Philadelphia Motor Boat & Sportsmen's Show.

Pre-Season Bow & Arrow Hunting

It was agreed that when the Commission is assured there is sufficient sentiment throughout the State for pre-season bow and arrow hunting, further consideration will be given to the many requests for such a season.

Emeritus Commission for Retired Game Protectors

The Commission approved presenting each officer, holding or having held, a Game Protector's commission, with a commission as Game Protector Emeritus upon superannuation retirement, together with a badge similar to but about one-half the size of the regular badge of Game Protectors. Such commissions shall clearly state that the duties of the recipient shall be of an advisory nature, and no key to Game Commission gates will be given to such retired officers.

Increase in Number of Food and Cover Workers

The Commission approved the expansion of the Food and Cover Corps from 150 to not exceeding 200 persons.

Amendments of Rules and Regulations Governing State Game Lands

The following preamble and resolutions were unanimously adopted by the Commission:

WHEREAS, Section 940 of the Game Law empowers the Commission to formulate, adopt, post and enforce such rules and regulations as it may deem necessary or advisable; therefore

RESOLVED, By the Pennsylvania Game Commission that no person shall park a vehicle in front of any State Game Lands gate in such a manner as to interfere with the free use of the gate or the road on which the gate is located; and

RESOLVED, That this Rule and Regulation shall be posted and enforced in the same manner as other rules and regulations of the Commission, and that offenders shall be subject to the penalty provided by the Game Law.

Cooperative Farm-Game Program

Expansion of this program to approximately 1,000,000 acres, without specific limitation as to maximum size of any individual project was approved. No new projects shall be established until specifically approved by the Commission.

License Restorations

Upon separate motions made, seconded, and agreed to, and for good and sufficient reasons the Commission approved restoration of hunting and trapping privileges to the following persons: Bales, Ray D., 215 N. Scott St., New Castle; Doebler, Russell S., 602 Market Street, Warren; Guy, John C., Crenshaw; and Randazzo, Matteo, 1076 Allison Avenue, Washington, Pa.

License Revocations

Two hundred and eight persons had their licenses revoked at this meeting. Names, offenses, and revocation periods are listed in the back of this *GAME NEWS*.

Time of Next Meeting

It was decided to hold the next meeting of the Commission in early October.

GAME NEWS GETS NEW GUN COLUMN EDITOR

Starting with this issue, the regular monthly gun column of *GAME NEWS* will be edited by native Pennsylvanian Ed Shearer. Mr. Shearer replaces Ted Trueblood who was unable to continue as gun editor due to stress of other work.

Ed Shearer was born in the mountains of the Keystone State fifty-four years ago, owned his first dog at three months, caught his first trout at the age of six, and owned ten guns by the time he was ten years old. His life has been a continual round of guns, dogs, and fishing ever since. He was three times on the International Small Bore team and held the world's record for some time. Ed also was co-holder of the world's record for two-man team competition as well as twenty-five yard indoor title. He has won various matches at Camp Perry and Sea Girt and has done some exhibition shooting. Ed writes that his favorite sports are grouse and woodcock hunting and he has followed the call of the wild from northern Canada to the tip of the Florida Keys. We welcome him to the pages of *GAME NEWS*.



Ed Shearer



THE FINISHED GUN DOG

By HERBERT KENDRICK

BEFORE the gunning season opens next month, perhaps it would be advisable to study a few of the qualifications of a finished performer. The standards of bird dog perfection are reasonably well established, differing mainly in the matter of range, speed, and methods of working various cover. The trainer should be familiar with the qualities that make up an excellent gun dog, form an ideal in his own mind, and exert every effort to make the promising youngster conform to that ideal. Today that ideal is higher because sportsmen are demanding more of quality in their dogs, and very few are satisfied to shoot over ordinary meat dogs. They have learned to know the esthetic and inspirational side of shooting over the stylish points of a superlative performer. To know the fine qualities that constitute really high class efficient work before the gun, makes it possible for the trainer to systematically follow definite rules of training, which will ultimately bring the desired results.

The truly great shooting dog possesses a good nose, is endowed with intelligent bird sense, and is strong of body. He moves speedily with a long smooth easy stride, carries his head high, and uses a merry tail. These characteristics are his, through heredity and careful early development. All the remaining qualities of this dog of dogs are acquired by training and experience. Close association of trainer and dog is essential because a bond of affection is established between the two that nothing else can equal. The dog that loves his master will obey him, work for him, and will even face death for him. The same is true of the devotion the master has for the dog. Without this deep feeling, the dog never becomes really great, and the gunner never reaps the full benefits of a perfect hunting companion.

The finished shooting dog is able to survey the country to be hunted, then intelligently cover it with the least amount of wasted time and effort. He hunts the birdy places, and passes up lands obviously barren of game, adapts his pace and range to suit the occasion, maps his run so that back tracking and duplicating coverage is unnecessary.

He understands the habits of game and his experience has taught him how birds react under various conditions. He knows how to handle game when he finds it. With head high, he moves swiftly, confidently, accurately, and when game is definitely located, he instantly freezes into a stylish, lofty point. This unforgettable posture is retained until the gunners come to flush and shoot. He remains steady to wing and shot. Many hunters allow their dogs to break spot in order that crippled game may be caught before it has time to creep away into hiding. However, a dog is not a truly finished product until he can hold his point until his master orders him on.

(Continued on Page 32)

HOW IS YOUR CHOKE?

By ED SHEARER

IT'S October and nature is a riot of color. The air has taken on the quality of rare wine. There is a new note in the baying of the hounds while the setter has shaken off the indolence of summer and stands head high, testing the wind, enjoying new scents beyond by ken. In hundreds of homes shot guns are being fondled—pointed at this picture or that vase—bringing sharp cries of warning from the feminine contingent of the household. Another hunting season is at hand!

My first as well as future columns in *THE PENNSYLVANIA GAME NEWS* will be written for the average hunter. The chaps from the city, on the farms, and down at the forks of the creek are the fellows who pay the freight and have neither time nor inclination to dissect ballistic tables and formulas. They like to have their ballistics stated in terms of hits or misses in the field and this I will sincerely try to do.

Years of close acquaintanceship with game and hunters has convinced me that the great bulk of hunters are suffering from a bad case of "choke-itis". This disease results in buying guns and loads on the basis of the extreme range they will kill. The facts are, too many hunters are using guns with too much choke for the game they seek and for the ability of those birds or animals to hold within the spread of their pattern at those ranges. I believe this is due to a lack of understanding by the hunters of how size of patterns are governed by distance and choke. Of many hunters in the field with whom I've talked, few had any idea how much this meant to their success or lack of it. Shot size has nothing to do with it. Some talked of thirty-inch circles at forty yards, but then again, only a small percentage of game is killed at that range. When a hunter gets some cripples, he is too prone to think he needs more choke when usually the reverse is true.

So right now we had better do a little figuring at what ranges we kill our game. A survey over a period of years and under a wide range of conditions by competent observers works out about like this:

Ruffed grouse averages twenty-five yards, snipe average thirty yards, woodcock—twenty yards; pheasants—thirty yards; and rabbits about twenty-five yards. This is upland game of course. Now, following out this range business, we find further that more upland game is killed at ten to fifteen yards than at forty. Most is killed between twenty and thirty yards.

Now let's take a look at the size pattern into which a good full-choke gun will shoot its entire charge. Contrary to popular belief, the twelve, sixteen and twenty bores all shoot the same size pattern, at all ranges with the same degree of choke. The main difference is the smaller the bore—the thinner the pattern.

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THOSE BIG LITTLE THINGS—from Page 6



blade, and a fancy handle. So, the manufacturers give him what he wants instead of trying to educate him to the right kind of knife.

I'm pretty well convinced that a pocket-knife is all that is necessary when in the woods; but there is something about a knife worn on the belt that appeals to most men, including myself, and such a sheath knife can be very useful as it is readily accessible when needed and out of the way when not in use. It's almost the badge of identification of the deer hunter, and there are some men who would rather go into the woods without their pants, than go without the sheath knife.

However, they are almost always too big, and of the wrong design. Whenever I see a bunch of hunters with their whopping big sheath knives slapping their buttocks as they walk, I think they look like a band of desperadoes going out to murder someone. The average hunting knife is better fitted for killing than it is for its intended work—which is skinning and cleaning. I almost expect the hunter to leap bodily upon a deer and stab it to death with the 12-inch blade on his knife.

In camping or hunting, every ounce of weight counts if you have to carry it all day, so why burden yourself with a knife that could be either a small sword or a large dagger? A tiny sheath knife, little more than six inches overall, is all that you need for any knife work that you will encounter in the woods. If you are camping, you will have an axe for chopping; if hunting, there will be little need for heavy cutting.

A short, blade, then, is desirable—but what kind of short blade? First, it should not be too thick. More effective work can be done with a relatively thin blade. If intended primarily for skinning—as used by trappers—the blade should have a curve to it. Otherwise, the standard hunting knife curved tip is sufficient. It should be capable of taking a keen edge, and this eliminates most of the fancy stainless steel knives on the market today. They look pretty but won't cut. Try to select a good piece of steel and use a light film of oil or grease to keep it from rusting.

The handle is important, too. Wood is no good; it warps and twists if exposed to too much dampness. Bone handles are no good; they break too readily. Hard rubber handles, like pistol grips, also break easily. The standard leather washer handle has drawbacks, too. The leather dries out and shrinks, loosening the entire handle. Soaking the handle in oil or water will expand the leather rings and make the handle firm again; but that's a nuisance. Worst handle of all probably is the deer foot type, which looks romantic as all get-out, but is highly impractical.

Best of the above lot is the leather handle. Better still—except that they just don't look right—are the various clear plastic handles available. These do not warp or break and are impervious to the weather; but they look wrong. They seem as much out of place in the woods as chrome fittings would be on a gun. They are gaudy, whereas a knife should be quietly practical in appearance. My one hand-made knife has a handle made of what looks like some heavy insulating material from a machine shop, and is very practical; but it certainly isn't available on commercial knives.

So much for axes and knives, the two most useful things in a hunting camp and the least understood. There are other small things that loom large in the outdoorsman's life.

Let's say you have been hunting deer all morning in a wet snow. At noon you want to sit down to eat lunch. There is no place you can sit without getting a wet fanny, and a damp seat in the pants can be mighty uncomfortable for the rest of the day. Science fortunately has come to the rescue

of our posteriors. You can get a small square of waterproof plastic material, say 18 x 18 inches, that will fold to the size of a handkerchief, and sit on it. There also are lightweight cloths impregnated with waterproofing that will serve the same purpose. They can be used to wrap up sandwiches on a wet day, and then employed between a rock or log and yourself.

And speaking of lunch, last deer season I stuck an Army mess kit in the game pocket of my hunting coat. It was filled with bread and sandwich material. At noon I had a really hot lunch, instead of the burnt and charred sandwiches that usually are toasted over a fire. Sometimes I made up cheese sandwiches and buttered them on the outside. Then I'd grill them in the frying pan part of the mess kit, cooking them gently in the butter until the cheese melted and oozed out the sides of the sandwich.

When two of us shared the carrying, one would take the mess kit with buttered bread inside it, and the other would carry a tin of corned beef or Spam. We'd fry the meat and have hot sandwiches at noon. Believe me, a hot bacon or meat sandwich is a welcome change on a bitterly cold day from the usual frigid sandwiches carried by deer hunters. It warms the stomach and the soul to have such a sandwich at noon. When the meal is done, toss some white wood ashes and snow in the pan, heat it over the fire, rinse it out and the pan is clean. This forms a sort of primitive soap by combining the grease and the lye in the ashes. Carry the mess kit in a paper or cloth bag and it won't dirty the pocket holding it.

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HAND AXES

HUDSON'S BAY CRUISING AXE



STANDARD DOUBLE-BITTED AXE



SPORTSMEN—BOTTLENECK TO BETTER HUNTING—from Page 19

(2) reproductive failures (most mature does produce only one fawn and many none when poorly fed instead of the normal twins and triplets); (3) a movement to farmland for food which may result in serious crop damage; and (4) a wasteful, shameful winter loss from starvation and exposure. Second, when the range becomes overpopulated with deer, they remove food- and cover-producing shrubs and other plants to such an extent that cottontail rabbits, snowshoe hares, ruffed grouse, wild turkeys and other forest-dwelling game species are greatly reduced if not nearly completely extirpated in many regions. Third, when a deer herd exceeds the carrying capacity of the range, the excess will be removed by one means or another—disease, starvation, kill for crop damage, highway mortality, etc. This means that thousands and thousands of game animals are wasted each year, and the recreation that could have been provided, if they had been harvested, is lost.

In agriculture, we save only a small part of the crop as seed, and utilize the rest, knowing that next year the seed will produce another crop to harvest. With our deer in some states, we harvest a small number which would correspond to the farmer's seed, and leave the main crop to die and rot. Is this sensible management? If a state has 300,000 mature does in its herd, and if each of these does is capable of producing one to two fawns each when well fed, then it is reasonable to think that as many as 150,000 to 200,000 of these should survive until the hunting season in the fall, and that a number equivalent to this annual production could be harvested *every year* without reducing the productive capacity of the herd in the slightest! In this same connection, when food is the limiting factor as it is in Pennsylvania, Michigan, and other states, half the number of does when well fed will produce just as many, or more, fawns than twice as many poorly-fed does. Thus, the more the herd is reduced, the more food each mother deer will have to eat, and the greater her reproductive capacity will be. Even sportsmen should be able to see that a well-fed doe which has twin fawns is worth just as much to the sport as two under-fed does which will have only one fawn each. And in the meantime, the single doe is not going to consume as much of the precious winter browse as the two does will. Think it over!

Pennsylvania has kept accurate kill records for all of its buck and doe seasons. The total number of legal bucks (two or more points to one antler) killed during successive five-year periods beginning with

1915 shows a consistent increase—1915-19: 9,000; 1920-24: 28,000; 1925-29: 56,000; 1930-34: 106,000; 1935-39: 130,000; 1940-44: 143,000. *Beginning with the first doe season of any significance in 1928, there have been over 550,000 does killed since that time, and yet the buck kill has climbed steadily. And yet, the hunters of Pennsylvania always have, and still do, fight every declared doe season tooth and nail.* The pressure or their legal action has been sufficient to cause several proposed doe seasons to be suspended. The chances are that if they had permitted the conservation commission to manage the herd on a scientific basis, the hunters of that state could have harvested a million does during the same period and still have fully as many deer as at present.

But in spite of the fact that conservation departments in these states have made careful studies and have begged and implored the sportsmen, practically on bended knee, to listen to reason, they remain firm, and stubborn, and determined to see their deer hunting reduced to nothing. The fact that the deer only weigh about half as much as they did forty years ago means nothing; that the antlers are reduced to match-stick proportions is of no significance; and that dozens of dead deer in every wintering yard is merely game department propaganda. Could Shakespeare have been thinking about sportsmen when he had Puck make his famous observation about mortals?

In the East, the sportsmen are still forcing the game departments to import cottontail rabbits from Missouri for release, even though one research study after another has shown that the survival is low, and that the native stock is more than adequate without any imported additions. It is estimated that \$100,000 spent for Missouri rabbits to be released in Pennsylvania in mid-winter will supply for hunting the following fall about one rabbit for each 315 acres of land. Even though this information has been brought before the sportsmen of the state time and again, they still insist upon more and more rabbits from Missouri. *Think of it—the license revenue from 50,000 hunters provides only one rabbit for every 315 acres in Pennsylvania.*

These are just two examples picked at random to illustrate the distrust that hunters and fishermen seem to have for the wildlife profession. It is not uncommon to hear a hunter say that the game department of his state is trying to ruin the hunting and intimates that there must be an epidemic of insanity in the department. It would take a psychologist to explain why hunters and fishermen imagine that the men who have

dedicated their lives to conservation work, who are working for sportsmen and being paid by the sportsmen's money, could possibly want to ruin their sport. What possible motive could they have, and what could they gain? Even if a wildlife specialist felt no obligation to the sportsmen, his desire for success in his profession would certainly stimulate him to his best efforts. Surely a sportsman who will take a moment to think will see that such reasoning must be false.

In spite of this fraternal spanking, the intent of this article is not to criticize the organization of sportsmen nor the federation of sportsmen's clubs as such, because this organizing and meeting of good fellows with a lot in common is the proper thing to do. Hunters and fishermen enjoy each others companionship, and they like to get together to work and swap ideas. And, with the potential influence of their millions of members, the sportsmen's clubs are capable of accomplishing much toward the conservation and restoration of our natural resources. The only point of criticism of these groups is that certain of their activities are misdirected. Instead of saying, "Here's what we want you to do" to their conservation departments, they might better say, "What would you like to have us do to help improve our hunting and fishing?"

As organized and federated groups, the sportsmen of the United States can fight against anti-conservation legislation, stream pollution, marsh drainage, overgrazing in the West, the exploitation of our wildlife, and many other endangering influences. And they should fight for the restoration of nesting areas for waterfowl, better forest fire protection, the soil conservation program, government control of marine fisheries, the perpetuation of free public hunting—just to mention a few. (This should leave them little time for fighting their conservation departments).

And as an individual sportsman, they can obey the game and fish laws and report others who wilfully violate them; they can build good will between the farmer and sportsmen, help plant game food and cover, feed game in winter, help with stream improvement work, teach a young boy or girl how to hunt and fish, and aid in an endless number of other activities.

With the ever-increasing demand upon our supply of fish and game, the job ahead looks mighty big even with everyone co-operating, and, with sportsmen bucking the conservation departments, it presents a very discouraging picture. Let's try to have a little more confidence in the professionally trained wildlife man; *he's on your side, and he's your best friend!*

OUTDOOR KIDS—from Page 13

"Yea, that's right, I guess. But say, Billy, how does this thing move around without wings?"

"It just walks and hops, that's all. And I'll bet walking sticks don't move very far from where they are hatched either," the boy mused.

"Hatched? Do they come out of eggs?" Jane inquired.

"Yes. One day Pop was telling me about all the funny kinds of eggs insects lay. He said that a female walking stick drops her eggs from up in a tree. The eggs patter down through the leaves and fall to the ground. They remain there until the next spring or even two years

before they hatch into little walking sticks. The little ones look just like the old ones.

"Pop told me about a man that stood under a tree where a great many females were laying eggs and the eggs, bouncing from leaf to leaf, sounded just like rain pattering overhead," Billy told his sister.

"Uh, huh! Mom's calling us for dinner. Let the walking stick go and come on, Billy. I'm hungry."

As the backdoor slammed and the children disappeared, the walking stick started off through the grass, heading for an apple tree nearby.

DUCK REGULATIONS—

from Page 9

the 30 day season this is like trying to hit a home run off Lefty Grove with your eyes closed. Still, it must be done, for the North American duck population could never stand the pounding that would result from a ninety day season. There just aren't enough birds to go around for that long a season this year.

Where a large favorable waterfowl area forms the political border between two adjacent states, the regulation problem becomes ever more complex. Lake Champlain, between Vermont and New York, is a typical example. If the season opens first in New York because of early flights along the St. Lawrence and Lake Erie, Vermont hunters who normally hunt Champlain get as mad as Ethan Allen's Green Mountain Boys, and perhaps rightly so; the New York hunters may have driven most of the local ducks from Champlain by the time Vermont's season opens two weeks later.

The problem becomes really knotty when consideration is given to the type of shooting popular in different localities. "Jump" shooters for puddling ducks in the northeast generally prefer an early season when teal and local blacks are available. Whereas, hunters who prefer to shoot diving ducks and the big "Canadian" blacks that normally arrive later in the season, want an opening day later in the fall. Reconciling these marked hunting preferences is difficult without overshooting either one part of the resource or the other. The optional split season recommended by the regulations committee which has become the legal season for many of the coastal states this year is an attempt to reconcile these variations. Magnify the differences in local hunting preferences by 48, and it is understandable that the migratory bird regulations committee occasionally makes honest errors and often is on the fire.

While we were considering the dove regulations, I was shown two letters from prominent sportsmen in the same town in a state next to my own. One sportsman suggested that the season on mourning doves be opened on August 15th, maintaining that most of the doves would be gone and unavailable to him to hunt if the season opened any later. The other sportsman asked that the season remain closed until October 15th to allow all young doves to mature before the hunting season. Both recommendations were well-intended and based upon sound thinking as far as it went. Both failed, however, to consider the dove as a continental resource to be managed in the best public interest. It was my impression that the best public interest called for a season mid-way between the two suggested dates in order to wisely use the surplus through hunting and still safeguard the resource for the future.

What about the 35 days the Pacific flyway hunters had enjoyed in 1947? What about the five duck daily limit Pacific and Central flyway hunters were allowed in 1948? If we easterners want the same privileges we have two courses of action. We can sit, wait, and talk until fortuitous cir-



STARTING THEM YOUNG

From the time that a child is old enough to follow a simple narrative, fond parents or any other members of a family for that matter, invariably entertain and unconsciously instruct the youngster with stories of animals. *The Three Bears*, *Red Riding Hood*, the stories of *Bre'r Rabbit* and his numerous briar patch associates, assorted fables of which *The Hare and the Tortoise* is a good example, are just a few of the many which may stir nostalgically in the dim recesses of most adult memories. The procedure, it must be admitted, is a natural for getting a child interested in out-of-door pursuits and conservation.

cumstances produce a bang-up duck crop, or we can share some of the responsibility by developing a public consciousness of the needs and values of our waterfowl and by doing something constructive about it on the ground. Remember the life span of the average duck is only a few years and you either harvest the surplus when its available or you don't. That's another reason why we must watch our breeding stock.

It's easy to sit in our blinds and complain, but it is more effective to get out in the marshes and help by creating feeding, resting, and nesting areas for ducks and geese. Organized sportsmen can do much to improve their shooting for there are thousands of opportunities to build waterfowl habitats. If your marsh, or the marsh you hunt, isn't producing or feeding the number of ducks that it should, get the advice of your state game department or the Fish and Wildlife Service. Employees of these organizations are professional duck doctors and can diagnose the ailments of your marsh and tell you how to remedy them. They can suggest new areas to impound, can give you plans for

Larry Croll's parents of Slippery Rock followed up this time-honored treatment by getting the seven-year-old lad an inexpensive camera. From the very first, Larry's subject-preferences were animals, so he snapped his dog, a pet rabbit, cows and other equally photogenic subjects. Early in his "career" or about three rolls after getting the camera, he snapped the accompanying photograph of mallards in the icebound Pymatuning Spillway.

Larry, now in the third grade of the Slippery Rock Laboratory School, still pursues his hobby with unabated enthusiasm. Currently, he has his sights leveled for a crafty old pheasant living in the back of his barn.

dams, dikes and water control structures, can tell you how to manipulate water levels to produce tons of duck food. If you'll do these things, the job of the regulations committee will be easier, for more duck habitat will mean more ducks and more ducks mean less strict regulations.

Do not forget that regulations alone can do only two things: they can safeguard the resource for present and future public use; and they can provide the most equitable, man-made distribution of the year's harvestable surplus. Regulations alone cannot fully restore ducks, but habitat improvements can bring them back. The most effective restoration can be done by creation of more waterfowl areas, by pulling on our boots and managing our marshes.

If you're not satisfied with the duck season in your state, or if the season didn't coincide with the fall flight, don't write to me about it, I've had enough of that problem already. Besides, I might never obtain permission to sit in with the regulations committee again and I'm not sure that I want to, either.

1949 Pennsylvania Open Seasons
For Waterfowl and Other Migratory Game Birds
Under Federal and State Regulations

	Daily Limits	1949 Open Seasons (Sundays Excepted)	
		First Day	Last Day
Rails and Gallinules (except Sora), combined kinds	15	Sept. 1	Oct. 30
Sora	25	Sept. 1	Oct. 30
Coots	15	Oct. 21	Nov. 29
Wild Ducks, except American and Red-breasted Mergansers (See Exceptions)* ..	4*	Oct. 21	Nov. 29
American and Redbreasted Mergansers	25	Oct. 21	Nov. 29
Wild Geese	2	Oct. 21	Nov. 29
Woodcock	4	Oct. 10	Nov. 8
Doves	10	Oct. 10	Nov. 8

***Exceptions**—The regular daily duck limit of 4 shall not include more than one (1) Wood Duck. The daily bag must not contain more than two (2) Canada Geese, but may in addition include 3 Blue Geese. *Possession Limits* (after first day): Ducks, two days' bag, but only one (1) Wood Duck. American and Red-breasted Mergansers, no possession limit after first day. Woodcock, 8. Geese, and other migratory game birds, daily bag only. Possession 90 days after close of season where taken.

No Open Season—Wilson's Snipe (Jacksnipe), Snow Geese, Brant and Swans.

Shooting Hours (E.S.T.)—From beginning of respective open seasons to *October 31 inclusive*: Woodcock and doves, one-half hour before sunrise to sunset daily; waterfowl and coots, from one-half hour before sunrise to one hour BEFORE sunset, except that *the hour for commencement of season* for waterfowl and coots on first day is 12 o'clock Noon; November 1, 9 a.m. to one hour before sunset for waterfowl 5 p.m. for woodcock and doves; November 2 to end of respective seasons 7 a.m. to one hour before sunset for waterfowl, 5 p.m. for woodcock and doves; rails and gallinules, from opening date to October 20, inclusive, daily shooting hours one-half hour before sunrise to sunset. October 21 to October 30, inclusive, one-half hour before sunrise to one hour before sunset.

Exception: On the open waters of Lake Erie and the open tidal waters of the Delaware River lying within the Commonwealth from Trenton Falls to the Delaware State Line (not including *inland* tidal water), when shooting from boats or blinds at least 100 yards from shore or the shoreline of any peninsula or island within said Lake or River, the Federal one-half hour before sunrise to one hour before sunset regulation applies throughout the waterfowl season, except on November 1, when shooting before 9 a.m. is unlawful.

Migratory Bird Hunting Methods

Permitted: Shotgun only, not larger than 10-gauge, fired from shoulder (including hand-operated repeating shotgun of not more than 3-shell capacity, which must be plugged to 3 shots so that plug cannot be removed without disassembling the gun); bow and arrow; dog; blind; boat propelled by hand; floating device other than sinkbox; artificial waterfowl decoys. Injured or dead waterfowl may be picked up by means of a motorboat, sailboat or other craft.

Prohibited: Automatic shotgun; hand-operated repeating shotgun of more than 3-shell capacity in magazine and chamber combined; all rifles; live duck or goose decoys; automobile; aircraft; sinkbox (battery); power boat, sailboat, or any device towed by power boat or sailboat; the placing or distributing in any manner of corn, wheat, oats, or other grain or product thereof, salt, or any kind of food, whereby migratory game birds are attracted or lured; and taking of waterfowl by use of cattle, horses or mules. No motor-driven land, water or air conveyance or sailboat may be used to concentrate, drive, rally or stir up waterfowl or coots.

Federal Stamp for Migratory Bird Hunting

It is unlawful for a person over the age of 16 years to take migratory waterfowl unless he carries on his person an unexpired Federal migratory bird-hunting stamp, validated by his signature written in ink across its face. Not valid after June 30 following date of issue. *This stamp is not required to hunt Doves, Woodcock, Rails and Gallinules.*

THE PENNSYLVANIA RIFLE—
from Page 5

sylvania rifle figured prominently in Andrew Jackson's defense of New Orleans during our "second war for independence" fought against Great Britain. From behind the battlements of cypress logs, hogsheds, and cotton bales, these unerring backwoodsmen accounted for over 3300 casualties while suffering only minor losses to themselves.

The winning of the west, the successive victories over the plains tribes, and the territory gained from the war with Mexico, were stages in the carving out of our national domain made possible, in part, by the widespread use of rifles of the Pennsylvania pattern. The closing chapter in the history of this famous gun came with the conversion of flint-locks into percussion types in the 1830's. The next several decades brought a number of revolutionary changes in the making of guns that completely outmoded the older firearm. Possibly the final service in the active life of the old flint-lock rifles was their conversion into percussion types and their repair in large numbers for use in the opening engagements of the Civil War. Today they are museum pieces and collectors' items, but one cannot look at them nor handle them without admiring their beauty of line and ornament, and without grateful remembrance that in the hands of their hardy and resourceful owners they helped win a continent, and freedom for its people.

References:

Herbert H. Beck, Martin Meylin,
A Progenitor of the Pennsylvania Rifle.
Lancaster County Historical Society
Papers, V. 53, 1949.
F. R. Diffenderfer, The Lancaster Rifles,
Lancaster County Historical Society
Papers, V. 9, 1904-5.
John G. W. Dillin, The Kentucky Rifle,
Washington, D. C., 1924.
W. U. Hensel, The American Rifle,
Lancaster County Historical Society
Papers, V. 9, 1904-5.
H. K. Landis and G. D. Landis, Lancaster
Rifles, in The Pennsylvania German
Folklore Society, V. 7, 1942.
Felix Reichmann, The Pennsylvania Rifle,
Pennsylvania Magazine of History and
Biography, V. 69, 1945.
Ray M. Smith, The Kentucky Rifle and
Its Snyder County Makers. Snyder
County Historical Society Bulletin, V.
2, No. 8, 1946.

Pennsylvania Rifles in Action
This Month

Pennsylvanians who want to see Pennsylvania rifles in action will get that opportunity this month at Shartlesville. There the world's muzzle-loading rifle championship will be held at the Blue Mountain Muzzle-loading Rifle Association grounds on October 15 and 16. The range will be open at 9:00 a.m. and closes at 5:30 p.m. Matches will feature both men's and women's competitions and 15 matches will be fired during the two days.

THOSE BIG LITTLE THINGS—
from Page 23

This may seem like a very small thing, but it's important, too: Threaten to divorce the wife who sends you into the hunting field with a couple of sandwiches made of "cold cuts!" When they put a thin slice of veal loaf or something like that between two pieces of bread and expect it to sustain you in the woods, they are making you eat a bridge luncheon outdoors. Cold cuts are fine in their place—which is at an evening get-together—but they taste like the devil in the field. Have your sandwiches made of thick slices of cold roast beef, pork, chicken or turkey, or something equally satisfying.

It scarcely seems necessary to mention compass, topographical survey maps and dry matches as several of those little things which can mean so much to the camper and hunter; but I have met too many bewildered persons in the woods to believe that those who need them most take along these precautions against an uncomfortable spell of being lost. I consider them prime necessities in strange country, and, even more important, is some knowledge of how to use maps and compass. Knowing where north is cannot help you a bit if you don't know in what direction you want to go to reach camp, auto or your companions.

A winter deer camp—especially if it has been closed up, as most are, all the other months—is one of the coldest and most forbidding places in the world until fire and heat have been in it for several days. Everything, including the cots, is cold and damp. The damp creeps through the bed clothing you have brought along and chills your bones. Here is where a sleeping bag is ideal. It has a waterproof exterior which keeps out the creeping cold from the bunk, and its dry interior keeps you warm.

However, perhaps you are sleeping out in a tent, either camping or hunting, and you have only a blanket or two. Then you will appreciate one of those tiny aids to comfort that we are talking about in this article. Throw six big blanket pins into your duffel. With them, you can make a good sleeping bag out of a blanket, folding under and pinning down the bottom so your feet don't stick out, and pinning up the open side. Crawl into this and those annoying drafts that usually sneak into a blanket even in moderate weather won't annoy you.

Before going to a deer camp, or camping out in a tent, purchase a supply of nails in various sizes, from small ones up to spikes. You need only a few of each, but you will be amazed by their usefulness. They take up no room, and add very little weight, but will come in handy in a dozen different ways.

Admittedly, these are small things; but they are more important in the long run than guns and ammunition, tents or the major things. They can make or break a trip in the field. Try to anticipate *all* your needs, and not just those connected with firing a gun at game. You will have more fun and comfort, too.

Official 1949 Open Seasons and Bag Limits
for Pennsylvania

(See separate summary for Waterfowl and other Migratory Game Birds)

Open season includes all dates listed, Sundays excepted for game. On November 1 no hunting of any kind before 9 a. m. Except November 1, shooting hours daily are 7 a. m. to 5 p. m., but from July 1 to September 30 inclusive, 6 a. m. to 7:30 p. m. (All shooting hours based on Eastern Standard Time.)

UPLAND GAME (Small Game possession limit two days' bag)	Bag Limits		Open Seasons	
	Day	Season	First Day	Last Day
Quail, Bobwhite	4	12	Nov. 1	Nov. 12
Hungarian Partridges	2	8	Nov. 1	Nov. 12
Ruffed Grouse (Open 6 days only)	2	6	Nov. 1, 2, 3, 10, 11 & 12	
Wild Turkeys (See counties closed and those with restricted season below)*	1	1	Nov. 1	Nov. 26
Ringneck Pheasants, males only	2	8	Nov. 1	Nov. 26
Rabbits, Cottontail	4	20	Nov. 1	Nov. 26
Squirrels, Gray, Black & Fox (combined kinds)	4	20	Nov. 1	Nov. 26
Squirrels, Red (Closed October only)	Unlimited		Nov. 1	Sept. 30, 1950
Hares (Snowshoe Rabbits)	2	6	Dec. 19	Jan. 2, 1950
Raccoons, by individual or hunting party*	5		Nov. 1	Feb. 1, 1950
Raccoons, by trapping*		35	Nov. 10	Feb. 1, 1950
Woodchucks (Groundhogs), both 1949 & 1950	5	Unlimited	July 1	Sept. 30
Grackles (Protected October only)	Unprotected		from Nov. 1 to	Sept. 30, 1950
Bears, over one year old, by individual	1	1	Nov. 14	Nov. 19
Bears, as above, by hunting party of three or more	2	2	Nov. 14	Nov. 19
Deer, male with two or more points to one antler, by individual	1	1	Nov. 28	Dec. 9
Deer, Antlerless (See note)* by individual			Dec. 10 only	
Deer, as above, by hunting party of six or more (Antlered and Antlerless combined)	6	6		Deer-hunting dates above
NO OPEN SEASON—Hen Pheasants, Cub Bears and Elk.				
FURBEARERS—(See notes under Special Regulations)*				
Skunks	Unlimited		Nov. 10	Feb. 1, 1950
Minks and Otters	Unlimited		Nov. 10	Dec. 10, 1949
Muskrats (By traps only)*	Unlimited		Jan. 1	Feb. 1, 1950
Beavers (Traps only, 8 counties closed)*	2	2	Feb. 15	Mar. 1, 1950
Opossums (Closed October only)	Unlimited			Open all months except Oct.

*SPECIAL REGULATIONS

Turkeys, Counties Closed—Adams, Bradford, that part of Cambria south of Conemaugh River, Carbon, Clarion, Columbia, that part of Cumberland south of U. S. Highway Route No. 11 to the west shore of the Susquehanna River, Fayette, Forest, that part of Franklin south of U. S. Highway Route No. 11, Greene, Lackawanna, Luzerne, Monroe, Northampton, Pike, Schuylkill, that part of Somerset north of the Pennsylvania Turnpike, Susquehanna, Venango, Warren, Wayne, Westmoreland, Wyoming and York.

Turkeys, Restricted Season—Cameron, Clearfield, Clinton, Elk, Jefferson, Lycoming, McKean, Potter, Snyder, Sullivan, Tioga and Union, NOV. 1 TO NOV. 12 ONLY, INCL.

Raccoons—Hunting season begins at 9 a. m. on first day, and ends at noon on last day (See instructions below concerning trapping). May be hunted day or night, Sundays excepted. The season limit applies to hunting and trapping combined.

Antlerless Deer Season, Statewide, One Day Only—May be taken December 10, without special permits. A person may kill only one deer (either a legal antlered or an antlerless deer—not both) during the 1949 season. The regular camp limit applies to the combined seasons and sexes. Season may be closed in any county under Act 221 of 1949. (Newspapers will announce closed counties, if any.)

Beavers, Counties Closed—Allegheny, Beaver, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland. No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to Protector in District or County where trapped.

Trapping—Traps shall not be placed, staked, or set before 7 a. m. on the first day of the open seasons for furbearers and raccoons. Trapping closes at 12 o'clock noon on last day. Traps must be tagged with metal name tags.

Snares—Without springpoles for taking predators from December 16 to March 31, 1950, legal only in Clarion, Crawford, Forest and Warren Counties.

(FIXED BY PENNSYLVANIA GAME COMMISSION AT MEETING JULY 1, 1949)
1949 HUNTING LICENSE IS VALID SEPTEMBER 1, 1949 TO AUGUST 31, 1950,
BOTH DATES INCLUSIVE



Are these items on your camping list?

WHEN THE FLOCKS COME DOWN

—from Page 11

is its source, none other than Bill Guiney, a Game Commission employe at Pymatuning Refuge and one of the keenest outdoorsmen it has ever been my privilege to know.

Bill saw a sizable flock of Canada geese leave the refuge presumably embarking on the next leg of their southern flight. However, a series of hoarse honks, plainly anxious, drew his attention to the water. There he saw a lone goose making frantic but futile attempts to join its departing companions. It was obvious that the goose, a magnificent gander, was crippled or otherwise incapacitated although it could swim with apparently undiminished power.

In the meanwhile, the flock swung back, circled low over the solitary bird and called insistently. After executing the maneuver three times without eliciting any response, the sagacious birds splashed to a landing and clustered about the lone gander, most of them clamorously honking.

Now comes the unbelievable part of this narrative. Anyway, Bill declared that several geese closed in on the cripple and attempted to prod him into flight with their bills! After several unsuccessful attempts the flock once again took off, this time assuming the familiar V and winged off into



"The new season on bear is really tough! It's only 30 minutes long and you're only allowed one shot."

the blue, the clangor of their cries lingering long after they had disappeared into the distance. It may be added, that after recovering from his injuries or ailment the gander joined and went south with a later contingent of his fellows.

The mysterious urge of migration, that compelling force often manifesting itself in man himself. When the flocks come down

from the north is it any wonder that the haunting calls of the sky voyagers imbue all creatures within hearing with a longing to be off for far off lands. The crazy flight of the grouse (erroneously attributed to lunar influences), the scattering of the squirrel clan, the vague uneasiness of rabbits and pheasants; the impulse which causes deer to be seen in the most unlikely places. It's a powerful instinct designed for the dispersal of life to assure its perpetuation or to destroy it if necessary as witness the fatal migrations of the European lemmings, the little arctic rodents which migrate in immense numbers and whose headlong rush not even the sea can immediately stem.

Wherever he may be when the flocks pass over, man must gaze in fascination, his innermost self torn between the cloying influences of civilization and the wild, free spirit which seeks expression. "Pshaw," he may mutter to himself as he turns away from the sky, "it's just a flock of geese." But, the shuddering thrill that courses through his frame is as refreshing as a cool drink to a thirsting desert traveler. It re-establishes his kinship to a past dim and forgotten, a past which he strives to relegate to the comparative obscurity of his stone hatchet and skin clothing. It is a positive reaffirmation of man's dependence on natural forces.

HOW IS YOUR CHOKE—from Page 22

Experiments have shown that it takes an average of five pellets on body-shot game to effect clean kills. Thus, it's the density of the pattern which determines the killing range of these bores. A good full choke bore will shoot its whole charge within a thirteen to fifteen inch circle at twenty yards. At twenty-five yards an eighteen inch circle is made and at thirty yards—a circle about twenty inches in diameter. It takes thirty-five yards to get the ideal pattern of thirty inches.

Now let's take a grouse and see what happens. At ten to fifteen yards, you miss or blow it up. Either way you lose. At twenty yards the answer is the same. At twenty-five yards you get either a well-peppered bird or a cripple from the edge of the pattern with still only a little lee-way on your aim. At thirty yards the pattern is not giving us too much and there is an increased chance to cripple a bird. Not till we get to thirty-five yards do we get a run for our money and then your best chance is gone. Maybe this will explain a lot of misses.

Well, let's see what we can do about it. We will stick as close to a thirty inch circle as we can because it gives us clean kills with a reasonable amount of leeway on our aim.

A straight cylinder bore will give us a thirty inch pattern at twenty yards with a generous spread at fifteen yards. No blown-up birds here. It maintains killing patterns up to thirty-five yards which is fine for woodcock, rabbits and birds in thick brush but patterns are apt to be a bit unreliable at longer ranges.

Improved cylinder or quarter choke will take about twenty-three yards for a thirty inch circle with a workable spread at fifteen yards and with forty-five percent pattern at forty yards. This choke also gives much better pattern control and comes close to the ideal upland choke.

A modified or one-half choke will take about twenty-six yards, is a little shy at very close ranges but gives killing patterns at forty yards. This boring seems to handle most any load. It's a good bet for a one-barrel upland game gun.

The improved modified or three quarter choke will take a full thirty yards or a little better. It's too tight under twenty yards with its best working range from twenty-five to thirty-five yards.

A lot of trap guns are bored this way, giving dependable killing patterns beyond the forty yard mark.

Now before you reach for the hacksaw, let me say this. I did some hacksaw work on one of my guns some years ago and thereby ruined one of the best long range guns I ever owned. It was deadly on woodcock and close shots but I collected enough feathers at thirty yards and over to stuff a set of pillows. If you have the wrong boring for your shooting, there are two outs.

The first and probably the best is to return the gun to the factory and have the choke relieved the desired amount. If the gun is a single barrel, you can have one of the variable choke devices fitted such as the Poly-Choke or numerous other compensators which employ tubes. This comes close to the ideal combination for an all-round gun.

The other out is the little heard of brush loads. These loads are marketed by the loading companies under various names. Their principle is all the same. Cardboard partitions within the shot charge cut it up and make it scatter. It will open up a full-choke gun to about an improved cylinder which means practically a fifty percent better hitting chance. Patterns will not run as uniform as from a barrel-bored this way but you can't have everything in this life either.

A word of caution here in case you elect to send your gun to the factory or to a private gunsmith. Factory conditions are still uncertain and it may take from three weeks to three months to get the job done. But you will be sure of a good job. Since the war there has been a rash of gunsmiths whose claims are not borne out by their work. I have seen some fine guns ruined by misplaced faith on the part of the owners. This is not meant to detract from our really fine gunsmiths whose superb work has played a great part in the development of our fine guns—but be sure of your gunsmith.

The subject of loads will be discussed further in a later column but it is well to remember that some judgment is needed in adapting the size of shot to the game. If you shoot at a snipe near the limit of your gun range with number six shot, you will probably miss. If you shoot at a grouse under the same conditions, with number "nines", you will fail to kill.

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of August, 1949

ALLEGHENY—\$280.00		
Becky, Ray, 1424 Jenny Lind Avenue, McKeesport. Failure to display license tag while hunting	\$ 20.00	
Haus, Geza, 1713 Vance Avenue, Coraopolis. Failure to display license tag while hunting	20.00	
Hoskin, Kenneth Thomas, R. D. No. 3, Elizabeth. Failure to display license tag while hunting	20.00	
Jack, Samuel L., 3508 Grace St., Munhall. Possessing loaded rifle in vehicle in motion along highway	25.00	
Kazakaitis, Adam John, 4 Crossman St., Pittsburgh 3. Hunting without resident license	20.00	
Koontz, Harry, 1158 Brenton Avenue, Braddock. Possessing rifle in vehicle standing along highway	10.00	
Lillard, Charles Adam, 2215 Wylie Avenue, Pittsburgh 19. Hunting without resident license	20.00	
Lukach, John Vincent, R. D. No. 1, Box 65, Monongahela. Dog chasing small game in close season	10.00	
Nozsar, Adam, 108 Main St., Coraopolis. Failure to display license tag while hunting	20.00	
Polosky, Mike Andrew, Box 167, Wildwood. Possessing live raccoon without permit	25.00	
Redmond, William Pub, 112 13th St., McKeesport. Possessing of rabbit taken in close season	10.00	
Sauers, Raymond Richard, 432 Kennedy Avenue, Pittsburgh 14. Possessing of a protected bird	10.00	
Simmons, James, R. D. No. 5, Crafton. Possessing live raccoon without permit	25.00	
Spano, Nick, 406 Cabbage St., Carnegie. Possessing live raccoon without permit	25.00	
White, James Robert, R. D. No. 1, Monongahela. Dog chasing rabbit in close season	10.00	
Wisley, Joe, 220 Colfax St., Springdale. Killing a skunk in close season	10.00	
ARMSTRONG—\$25.00		
McGuire, Clifford Dale, Box 503, Freeport. Possessing live raccoon without permit	25.00	
BERKS—\$140.00		
Auman, Jr., John Winer, R. D. No. 2, Boyertown. Failure to display license tag while hunting	20.00	
Calabrese, Frank, 122 Belvedere Avenue, Reading. Failure to show hunters license on demand	20.00	
Gleringer, Edward Charles, 207 S. Franklin St., Fleetwood. Dog chasing and killing rabbit in close season	15.00	
Grablak, George William, 848 Bingaman St., Reading. Attempting to kill woodchuck during close season	10.00	
Hunsberger, Chester Wayne, R. D. No. 1, Bernville. Possessing loaded shotgun in vehicle in motion along highway	25.00	
Kerper, Vernon Alda, 751 Cacilee Road, Birdsboro. Failure to display license tag while hunting	20.00	
Tyson, Harvey, 385 Tulpehocken St., Reading. Possessing loaded rifle in vehicle standing along highway	10.00	
Weidner, Paul Reinert, R. D. No. 2, Boyertown. Failure to display license tag while hunting	20.00	
BLAIR—\$10.00		
Miller, Charles L., 114 8th Avenue, Altoona (Juniata). Killing one rabbit in close season	10.00	
BUCKS—\$30.00		
Gaspar, Frank Steven, Springtown. Possessing loaded rifle in vehicle standing along highway	10.00	
Sheldon, Doris Thelma, c/o John Haberern, Buckingham Valley. Hunting without resident license	20.00	
BUTLER—\$120.00		
Burr, John LeRoy, 204 Franklin St., Evans City. Possessing unloaded rifle, not securely wrapped in a vehicle in motion along highway	25.00	
Carnahan, William A., R. D. No. 1, Branchton. Possessing live raccoon without permit	25.00	
Harvey, Frank B., Box 107, Mars. Possessing loaded rifle in vehicle standing along highway	10.00	
Lowers, Clarence H., R. D. No. 1, Branchton. Possessing live raccoon without permit	25.00	
Malinski, Pete, R. D. No. 1, Butler. Possessing live raccoon without permit	25.00	
Snyder, Robert H., R. D. No. 1, Hillards. Dog chasing small game in close season	10.00	
CAMBRIA—\$215.00		
Bassett, William Bert, Elmora. Dog chasing game in close season	10.00	
Esgro, Frank, Box 316, Carrolltown. Dog chasing small game in close season	10.00	
Fulton, Jr., Robert, Revloc. Hunting woodchucks after 7:30 p. m.	15.00	
Hagens, Donald Dean, R. D. No. 2, Ebensburg. Hunting with firearm when under 16 years of age not properly accompanied ..	20.00	
Lohr, Clarence Dorse, 337 Crest St., Johnstown. Digging out woodchuck without required consent; Training dogs in close season	20.00	
McVicker, Clate, 719 Caldwell Avenue, Portage. Digging woodchucks from ground not under cultivation	10.00	
Malloy, Stanley, Revloc. Hunting woodchucks after 7:30 p. m. ..	15.00	
Morris, Rueben Henry, R-5 Christopher St., Johnstown. Training dog in close season; Digging out woodchuck without required consent	20.00	
O'Connor, Frank Lee, Route 4, Box 89, Johnstown. Digging out woodchuck without required consent	10.00	
Scaromizzino, Dominio Paul, 424 Main St., Portage. Digging woodchuck from ground not under cultivation	10.00	
Simmons, George Henry, Blandburg. Attempting to take game in close season	10.00	
Slagle, Joseph Cullifor, 150 Cooper Avenue, Johnstown. Attempting to take woodchuck in close season	10.00	
Thurau, Fred, R-13 Asborne St., Johnstown. Digging out woodchuck without required consent	10.00	
Trohanovsky, Thomas Paul, 508 1st St., Conemaugh. Failure to tag trap	10.00	
Whip, Percy O'Neal, 342 Crest St., Johnstown. Training dogs in close season; Digging out woodchuck without required consent ..	20.00	
Wike, Robert Roy, Revloc. Hunting woodchuck after 7:30 p. m. ..	15.00	
CAMERON—\$50.00		
Fackender, John Raymond, 116 Fairview Avenue, Butler. Possessing loaded rifle in vehicle in motion along highway	25.00	
Yale, Stephen Leroy, R. D. No. 2, DuBois. Possessing unloaded rifle, not securely wrapped, in a vehicle in motion along highway	25.00	
CARBON—\$40.00		
Bandzl, Karol Simon, 407 Fourth St., Palmerton. Failure to display license tag while hunting	20.00	
Rehrig, Raymond Peter, Weissport. Failure to display license while hunting	20.00	
CENTRE—\$355.00		
Chambers, Howard Clair, Clarence. Hunting for deer during close season	100.00	
Harris, George, Millheim. Possessing loaded rifle in vehicle standing along highway	10.00	
Hartman, Harquelm Hazel, 116 E. Irvin St., State College. Shooting within 150 yds. of occupied building	25.00	
Kermanec, Edward Steven, Clarence. Hunting for deer in close season	100.00	
Koieno, George Dominic, Clarence. Hunting for deer in close season	100.00	
Walk, Gene Russell, R. D. No. 3, Tyrone. Possessing loaded rifle in vehicle standing along highway	10.00	
Walk, William Willis, R. D. No. 1, Port Matilda. Possessing loaded rifle in vehicle standing along highway	10.00	
CHESTER—\$190.00		
Arrowood, Robert, R. D. No. 2, Nottingham. Possessing pheasant in close season	25.00	
DeHaven, Louis, R. D. No. 3, Nottingham. Hunting without resident license	20.00	
Kuleycki, Harry Leon, R. D. No. 1, Pottstown. Hunting game on Sunday	25.00	
Kurtas, John Joseph, R. D. No. 1, Pottstown. Hunting game on Sunday	25.00	
Mammarella, Albert Alfred, 107 Chestnut St., Coatesville. Failure to display license tag	20.00	
McGraw, George, Sadsburyville. Failure to display license tag while hunting	20.00	
Pierce, Jr., Austin, R. D. No. 2, Oxford. Transporting a pheasant unlawfully killed	25.00	
Pizzi, Albert Rocco, 430 Jefferson St., Downingtown. Killing rabbit during close season	10.00	
Yiaski, Michael Paul, 120 Morgan St., Phoenixville. Failure to display license tag while hunting	20.00	
CLARION—\$75.00		
Beichner, Charles H., Jr., Shippenville. Depositing garbage on State Game Lands	25.00	
Huber, Dean J., R. D. No. 1, Mayport. Killing woodchuck on Sunday	25.00	
Shick, Frank A. Shippenville. Depositing garbage on State Game Lands	25.00	
CLEARFIELD—\$115.00		
Clark, Alexander N., Ansonville. Failure to display license tag while hunting	20.00	
Desmet, Ashley N., McCartney. Hunting without resident license	20.00	
Hickman, James Kirby, R. D. No. 1, DuBois. Killing rabbit in closed season; Killing a rabbit from an automobile; Possessing a loaded rifle in vehicle standing along highway	30.00	
Rowley, George Irvin, R D, Olanta. Failure to display license tag while hunting	20.00	
Wayland, Donald Edward, Box 81, Rockton. Possessing unloaded rifle not securely wrapped in a vehicle in motion on highway ..	25.00	
CLINTON—\$345.00		
Cohick, Ernest L., 349 Champlain Avenue, Renovo. Setting two traps within 5 feet of a woodchuck den	20.00	
Giminiani, William David, 385 E. Pack St., Lock Haven. Attempting to kill deer in closed season	100.00	
Phoenix, Calvin Edward, R. D. No. 1, Mill Hall. Attempting to kill deer in closed season; Possessing unloaded rifle, not securely wrapped in a vehicle in motion along highway	125.00	
Smart, Paul Charles, 383 E. Park St., Lock Haven. Attempting to kill a deer in closed season	100.00	
CRAWFORD—\$80.00		
Gibbens, Ralph B., R. D. No. 2, Meadville. Giving false date on one gray fox to collect bounty	10.00	
Rober, Michael, Star Route, Titusville. Hunting game on Sunday	25.00	
Seeley, Charles, 630 W. Spruce St., Titusville. Hunting without resident license	20.00	
Ziegler, Florence, R. D. No. 1, Guys Mills. Disposing of ringneck eggs without propagation permit	25.00	
CUMBERLAND—\$20.00		
Kadel, Edgar Russell, Jr., 1418 Market St., Camp Hill. Hunting without resident license	20.00	
DAUPHIN—\$25.00		
Williams, James Ray, 713 N. 18th St., Harrisburg. Possessing a loaded rifle in vehicle in motion along highway	25.00	

DELAWARE—\$40.00

Riccardi, Frank Joseph, 319 E. 12th St., Chester. Failure to display hunters tag while hunting	20.00
Ruggieri, Michael, 219 Pennell St., Chester. Failure to display resident hunters license tag while hunting	20.00

ELK—\$65.00

Brown, Leo Adolph, Force. Failure to display license tag while hunting	20.00
Schatz, Jr., Louis Anthony, 837 Market St., Saint Marys. Possessing unloaded rifle, not securely wrapped in vehicle in motion on highway	25.00
Swackhammer, Merlyn Lloyd, Benzette. Failure to display license tag while hunting	20.00

ERIE—\$30.00

Hamilton, Dorson, R. D. No. 2, Albion. Possessing loaded rifle in vehicle standing along highway	10.00
Orr, William, Sr., Albion. Possessing loaded rifle in vehicle standing along highway	10.00
Spelton, Woodrow W., Edinboro. Possessing loaded rifle in vehicle standing along highway	10.00

FAYETTE—\$285.00

Christoff, John Anthony, Grays Landing. Failure to display license tag while hunting	20.00
Clark, Cecil Darrington, Box 241, Adah. Failure to display license tag while hunting	20.00
Goff, Raymond Henry, Box 186, Point Marion. Failure to display license tag while hunting	20.00
Grote, Raymond Robert, New Salem. Training dog in closed season	10.00
Harden, James Isaac, R. D. No. 1, Brownsville. Dog chasing game in closed season	10.00
Hostetler, Absolum Clayton, McClellandtown. Dog chasing game in closed season	10.00
Huff, London, Box 136, Adah. Hunting woodchucks after 7:30 p. m.	15.00
Marucci, Pete, R. D. No. 1, Brownsville. Dog chasing game in closed season	10.00
Perry, James Garland, Box 725, Masontown. Failure to display license tag while hunting	20.00
Petrovich, Nick Edward, Box 525, Masontown. Failure to display license tag while hunting	20.00
Pluta, Joseph James, Gibbons Glade. Possessing captive fawn deer taken in closed season	100.00
Price, Edward Reed, Box 151, Adah. Hunting woodchucks after 7:30 p. m.	15.00
Springer, John, Box 229, McClellandtown. Hunting woodchucks after 7:30 p. m.	15.00

FRANKLIN—\$30.00

Bricker, Archie, Fannettsburg. Dog chasing small game in close season	10.00
Kremer, Leighton Reynold, Jr., 21 Redwood St., Chambersburg. Possessing loaded rifle in vehicle standing along public highway	10.00
Smith, Robert George, 631 Broad St., Chambersburg. Possessing a loaded rifle in vehicle standing along public highway	10.00

GREENE—\$320.00

Albacker, Lee D., Rices Landing. Possessing loaded rifle in vehicle standing along highway	10.00
Bailey, George Milton, Carmichaels. Using an automobile to hunt or kill game	50.00
Bristor, Rollins Lawrence, 595 Ross St., Waynesburg. Using an automobile to hunt or kill game	50.00
Higginbotham, Thomas E., Rices Landing. Possessing loaded rifle in vehicle standing along highway	10.00
Lapsevich, Adam, Box 283, Nemacolin. Failure to display license tag while hunting	20.00
Lorinchack, Jr., John, Box 207, Nemacolin. Failure to display license tag while hunting	20.00
Lutz, Robert H., Rices Landing. Possessing loaded rifle in vehicle standing along highway	10.00
Mikalik, Steve, R. D. No. 1, Greensboro. Failure to display license tag while hunting	20.00
Smith, John Edward, Box 273, Mather. Failure to display license tag while hunting	20.00
Williamson, Osler William, Greensboro. Hunting without a resident license	20.00

HUNTINGDON—\$45.00

Hoover, Steward, R. D., Robertsdale. Dog pursuing game on State Game Refuge	25.00
Ruby, Lester, Coalmont. Hunting groundhogs with shotgun containing more than three shells	10.00
Watkin, Melvin Paul, Robertsdale. Training dog in close season	10.00

INDIANA—\$150.00

Empfield, Chester Blaine, R. D. No. 2, New Florence. Possessing raccoon in close season	25.00
McGee, Charles, Aultman. Possessing loaded rifle in vehicle standing along highway	10.00
Misner, Ernest Merton, R. D. No. 1, Homer City. Hunting woodchucks in close season	10.00
Pardee, Charles Harson, R. D. No. 1, Glen Campbell. Training a dog on game while carrying shotgun	10.00
Plavi, Steve Edward, Dixonville. Using a vehicle to hunt game ..	50.00
Robertson, Thomas Emmons, 58 Harrison St., Homer City. Possessing loaded rifle in vehicle standing along highway	10.00
Rowley, Jr., William Hugh, 213 W. Market St., Blairsville. Training dog in close season	10.00
Runco, Philip, Beyer. Shooting within 150 yards of occupied building	25.00

JEFFERSON—\$30.00

Alvetro, Floyd Vincent, P. O. Box 104, Stump Creek. Failure to show hunters license on demand of officer	20.00
Rugh, Charles Eugene, Valier. Killing one woodchuck over daily bag limit	10.00

LACKAWANNA—\$45.00

Giambra, Joseph A., 11 Elizabeth St., Pittston. Possessing woodchuck in close season; Possessing loaded rifle in vehicle standing along highway; Hunting game on Sunday	45.00
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LANCASTER—\$40.00

Derr, Cyrus Franklin, Bainbridge. Dog chasing small game in close season	10.00
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Smith, Christian Andrew, R. D. No. 3, Lititz. Dog chasing small game in close season	10.00
Stauffer, Harry M., 30 N. Mulberry St., Lancaster. Possessing a loaded rifle in vehicle standing along highway	10.00
Troop, Warren Harold, R. D. No. 3, Lititz. Possessing a loaded rifle in vehicle standing along highway	10.00

LEBANON—\$40.00

Anspach, George William, Newmanstown. Training dogs in close season	10.00
Strickler, LeRoy Ralph, Newmanstown. Training dogs in close season	10.00
Strickler, Walter Herbert, R. D. No. 2, Sheridan. Training dogs in close season	10.00
Weiss, Marshall Franklin, R. D. No. 2, Myerstown. Training dogs in close season	10.00

LEHIGH—\$20.00

Miller, Claude Harrison, 397 Alien St., Allentown. Failure to display license tag while hunting	20.00
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LUZERNE—\$30.00

James, Edward, 361 E. Poplar St., Nanticoke. Hunting with firearm not properly accompanied, when under 16 years of age ..	20.00
Vaverk, Joseph Peter, R. D. No. 1, Pittston. Dog chasing small game in close season	10.00

LYCOMING—\$280.00

Baker, Donald LaRue, R. D. No. 2, Williamsport. Possessing deer taken in close season; Using a motor vehicle to transport a deer illegally killed	150.00
Bastian, Clyde Emerson, Jr., R. D. No. 1, Williamsport. Possessing a loaded rifle in vehicle standing along highway	10.00
Bonnell, Clifford Stephen, R. D. No. 1, Trout Run. Possessing a loaded rifle in a vehicle standing along highway	10.00
Bonnell, Clyde Eugene, 1127 Washington Blvd. Possessing a loaded rifle in vehicle standing along highway	10.00
Kock, Welker LaRue, R. D. No. 1, Jersey Shore. Possessing deer taken in close season	100.00

McKEAN—\$218.00

Carron, Francis Camille, Hazelhurst. Possessing two beaver skins unlawfully taken	100.00
Galentine, Rex Benjamin, R. D. No. 2, Eldred. Possessing unloaded rifle, not securely wrapped, in vehicle in motion along highway	25.00
Kaminski, Stephen Walter, R. D. No. 1, Little Genesee. Making false declaration in claim for bounty on two foxes	(18.00 2 days)
Russell, Harold Edward, R. D. No. 2, Eldred. Possessing unloaded rifle, not securely wrapped, in vehicle in motion along highway ..	25.00
Russell, Ray Roland, R. D. No. 2, Eldred. Possessing unloaded rifle, not securely wrapped, in vehicle in motion along highway ..	25.00
Williams, George Andrew, R. D. No. 2, Eldred. Possessing unloaded rifle, not securely wrapped, in vehicle in motion along highway ..	25.00

MERCER—\$20.00

Lightner, Jack B., R. D. No. 5, Mercer. Dog chasing small game in close season	10.00
Scott, James H., 1425 Davie Avenue, Sharon. Possessing rifle in vehicle standing along highway	10.00

MIFFLIN—\$20.00

Stein, Harry Penrose, R. D. No. 2, Lewistown. Failure to display license tag while hunting	20.00
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MONROE—\$125.00

Armstrong, George J., Mt. Pocono. Failure to tag fur bearing animals removed from fur farm	25.00
Starnor, Edward Franklin, 431 Lincoln Avenue, E. Stroudsburg. Possessing doe deer in close season	100.00

MONTGOMERY—\$140.00

Eachus, Jr., Ralph George, R. D. No. 1, 10th & Chestnut Sts., Royersford. Failure to display license tag while hunting	20.00
Elmer, Sam William, 2480 Kenderton Avenue, Roslyn. Hunting without resident license	20.00
Hake, Celeste, Perkiomenville. Dog chasing small game in close season	10.00
Henderson, Charles, Dreshertown. Possessing woodchuck in close season	10.00
Hodges, James Malcolm, 535 Lemon St., Stowe. Failure to display license tag while hunting	20.00
Owens, John, 1422 Easton Rd., Willow Grove. Lending hunter's license tag to another	20.00
Rhoads, Harold David Moyer, R. D. No. 1, Boyertown. Failure to stop vehicle upon signal (or request) of Game Protector	10.00
Smith, Jr., LeRoy, 4th Avenue and Gay Sts., Royersford. Failure to display hunters license tag while hunting	20.00
Sutton, George Bevan, R. D. No. 1, Perkiomenville. Dog chasing small game in close season	10.00

NORTHAMPTON—\$65.00

Grabarits, Anthony Joseph, 446 E. 12th St., Northampton. Hunter damaging property	25.00
Handler, Joseph John, 453 E. 11th St., Northampton. Hunting without resident license	20.00
Hertzog, John Paul, 423 E. 10th St., Northampton. Lending hunter's license to another	20.00

PHILADELPHIA—\$25.00

Townsend, Alex, 1710 N. 20th St., Philadelphia. Possessing raccoon game in close season	25.00
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POTTER—\$670.00

Bunnell, Williard James, Ulysses, R. D. Killing doe deer in close season	100.00
Hoppe, Frederick James, Carter Camp. Possessing parts of deer taken in close season	200.00
Mericle, George Edward, R. D. No. 2, Shinglehouse. Possessing deer unlawfully taken	100.00
Stiles, Clair Edward, R. D. No. 2, Coudersport. Possessing loaded rifle in vehicle in motion along highway; Failure to stop motor vehicle on demand of Game Protector; Attempting to kill deer by use of artificial lights	135.00
Stiles, Edward Laverne, R. D. No. 1, Coudersport. Attempting to kill deer by use of artificial lights; Failure to stop motor vehicle on highway on demand of Game Protector; Possessing loaded rifle in vehicle in motion along highway	135.00

SCHUYLKILL—\$25.00		
Clauser, William W., 1426 Seneca St., Pottsville. Raising, selling or otherwise disposing of game without propagating permit ..	25.00	
SULLIVAN—\$225.00		
Boyles, Charles M., Hillsgrove. Unlawful possession of deer in close season	100.00	
Boyles, Gordon, Hillsgrove. Unlawful possession of deer in close season	100.00	
Lang, Joseph Michael, Mildred. Picking shrubs on State Game Lands	25.00	
SUSQUEHANNA—\$25.00		
Darrow, Lloyd Oscar, R. D. No. 2, New Milford. Possessing live raccoon without permit	25.00	
TIOGA—\$260.00		
Brecher, Earl William, R. D. No. 4, Wellsboro. Failure to report rabbit, killed destroying property	10.00	
Davis, Bruce Myrel, R. D. No. 6, Wellsboro. Using deer unlawfully taken	100.00	
McConnell, Grant Martin, Antrim. Possessing parts of deer unlawfully taken	100.00	
Smith, Oliver Perry, R. D. No. 4, Wellsboro. Possessing deer more than 60 days after close of season	50.00	
UNION—\$20.00		
Alkey, Albert Franklin, R. D. No. 1, Mifflinburg. Failure to display license tag while hunting	20.00	
VENANGO—\$199.00		
Anthony, Robert Lee, R. D. No. 1, Pleasantville. Possessing parts of deer in close season	97.00	
Daly, Calvin Glen, R. D. No. 1, Pleasantville. Possessing parts of deer in close season	92.00	
Vogan, Donald, N. S. S. R., Oil City. Possessing loaded rifle in vehicle standing along highway	10.00	
WARREN—\$20.00		
McGahan, Carl V., Oakview Par., Warren. Failure to display license tag while hunting	20.00	
WASHINGTON—\$160.00		
Antonioni, Julius Joseph, Box 4, Southview. Lending hunting license to another	20.00	
Askew, Carl Maynard, 336 N. Main St., Houston. Failure to display license while hunting	20.00	
Fazzalore, Jr., Frank, 65 Latimer Avenue, Strabone. Hunting without residents license	20.00	
Lawrence, James Horner, R. D. No. 2, Washington. Possessing loaded rifle in vehicle standing along highway	10.00	

Scott, Carl Denny, 64 Church St., Burgettstown. Dumping rubbish on State Game Lands	25.00
Vallone, Jr., Anthony, 311 N. Main St., Houston. Failure to display license while hunting	20.00
Wardle, Fredrich, Box 72, Venetia. Dog chasing small game in close season	10.00
Williams, James, Box 286, Daisytown. Killing rabbit in close season	10.00
Wright, Otis Henry, Box 21, Westland. Possessing live raccoon without permit	25.00
WESTMORELAND—\$30.00	
Gasperini, Pete, Jacobs Creek. Possessing a protected bird	10.00
Wible, Richard Oliver, Youngwood. Hunting without a resident license	20.00
YORK—\$65.00	
Bair, Richard Warren, R. D. No. 4, Hanover. Shooting across highway while hunting	25.00
Reachard, Earl Henry, R. D. No. 2, York. Dog chasing and killing game	15.00
Rebert, Clair Ralph, R. D. No. 4, Hanover. Shooting across highway while hunting	25.00
NON-RESIDENT—\$160.00	
Barret, Ebreil F., 250 Ehskin Avenue, Youngstown, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Black, Lester John, 779 Palmetto Avenue, Akron, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Hockenberry, Clarence Edward, 8119 Pine Ave., Niagara Falls, N. Y. Hunting without non-resident license	50.00
Hose, Myreil Franklin, Sabraton, W. Virginia. Hunting without non-resident license	50.00
McMahon, Eugene Leo, 219 Floral Avenue, Johnson City, New York. Picking shrubs on State Game Land	25.00

CORRECTIONS TO PREVIOUSLY PUBLISHED
GAME LAW VIOLATION LISTS

Through unavoidable errors, the following named persons were listed in previous issues as having committed Game Law violations. Their cases have been reviewed by either the courts or the Pennsylvania Game Commission and they have been found not guilty. The Pennsylvania Game Commission sincerely regrets publication of their names and apologizes for the mistaken reflection on their observance of the law.

Name	Address	Issue Published
Pirl, Glenn, R. D. No. 1, Heckman Rd., McKeesport		July

HUNTING LICENSE REVOCATIONS

At a recent meeting the Pennsylvania Game Commission revoked the hunting and trapping license privileges of the following named persons to the dates shown.

ADAMS		
Anderson, Paul E., R. D. 2, East Berlin	Aug. 31, 1950	
Russell, Edward S., R. D. 2, Gettysburg	Aug. 31, 1950	
ALLEGHENY		
Grimm, Joseph M., 4215 Dunkeld Place, Pittsburgh	Aug. 31, 1954	
Lichtl, Frederic, R. D. 3, Gibsonia	Aug. 31, 1950	
Wells, Jr., Charles S., 113 Leon Drive, Greentree, Pittsburgh	Aug. 31, 1950	
ARMSTRONG		
Conti, Lino, Box 458, Leechburg	Aug. 31, 1950	
BEAVER		
Kaluza, Jr., Alexander T., 1811 Tyler St., Aliquippa	Aug. 31, 1954	
BERKS		
Moyer, John W., R. D. 2, Box 33, Fleetwood	Aug. 31, 1950	
BLAIR		
Longenecker, Phillip L., 619 South St., Altoona	Aug. 31, 1950	
Possumato, Jerry G., 1431½ 3d Ave., Altoona	Aug. 31, 1951	
BRADFORD		
Chamberlain, Duane, R. D. No. 1, Columbia Cross Roads. Attempting to collect bounty through fraud	Aug. 31, 1951	
Johnson, Richard M., R. D. No. 6, Towanda. Setting trap within 25 feet of beaver dam; Failure to tag traps set for beaver above the water line	Aug. 31, 1954	
Leahy, Ann B., R. D. 3, New Albany	Aug. 31, 1950	
Reeves, Charles C., R. D. No. 2, Wyalusing. Setting more than ten traps for beaver; Setting trap closer than 25 ft. from an established beaver house	Aug. 31, 1951	
Shook, Paul J., R. D. 1, Wyalusing	Aug. 31, 1951	
BUCKS		
Fleck, William A., Kintnersville	Aug. 31, 1950	
Hoffman, Michael S., Springtown	Aug. 31, 1951	
Wetherill, George H., N. Radcliff St., R. D. No. 1, Bristol. Killing male ringneck pheasant in close season; Killing game pheasant on Sunday; Shooting within 150 yds. of occupied building	Aug. 31, 1951	
BUTLER		
Hoover, Martin V., 119 Franklin St., Slippery Rock. Failure to show hunter's license on demand	Aug. 31, 1951	
CAMBRIA		
Ginsky, Thomas A., South 16th Street, Spangler	Aug. 31, 1951	
Shomo, John C., 49 Iron Street, Johnstown	Aug. 31, 1950	
CAMERON		
Howlett, John, Cameron. Attempting to kill deer at night by use of artificial lights	Aug. 31, 1951	
CARBON		
Everett, James H., 402 Oak Street, Lehighton	Aug. 31, 1954	
Owens, Wilbur O., 576 Lafayette Avenue, Palmerton	Aug. 31, 1951	
Wagner, Jr., Arthur J., 967 Delaware Avenue, Palmerton ..	Aug. 31, 1951	

CENTRE		
Butlin, John I., Gen. Delivery, Philipsburg. Killing wild duck in close season	Aug. 31, 1951	
Hoy, Robert A., R. F. D. No. 2, Howard. Killing ringneck pheasant in close season; Killing game on Sunday	Aug. 31, 1951	
McCown, Richard B., Beta Theta Pi Campus, State College. Possessing male ringneck pheasant in close season	Aug. 31, 1951	
Miller, Fred C., Fleming	Aug. 31, 1951	
Rose, James, Pleasant Gap	Aug. 31, 1952	
Williams, Harry M., Beta Theta Pi Campus, State College. Possessing male ringneck pheasant in close season	Aug. 31, 1951	
CHESTER		
Milbourne, Harold R., 132 E. Minor Street, West Chester ..	Aug. 31, 1951	
Turner, Edward D., R. D. 2, Newtown Square	Aug. 31, 1950	
CLARION		
Shoup, Jack E., 160 Grand Avenue, Clarion	Aug. 31, 1950	
CLEARFIELD		
Bundy, Lyle S., 520 Turnpike Avenue, Clearfield	Aug. 31, 1952	
Duttry, George, R. D., Sabula. Throwing an artificial light upon deer while in possession of a firearm	Aug. 31, 1951	
Edinger, Everett, R. D. No. 2, DuBois. Throwing an artificial light upon deer while in possession of a firearm ..	Aug. 31, 1951	
Mulson, Carl I., Winburne	Aug. 31, 1952	
Sherkel, Clifford R., Box 51, Hyde	Aug. 31, 1952	
Smith, James, R. D. No. 1, Penfield. Possessing deer taken in close season; Possessing live raccoon without permit	Aug. 31, 1951	
Webster, Jr., Edward C., 100 Curtain Street, Osceola Mills..	Aug. 31, 1954	
COLUMBIA		
Gottshall, William J., R. D. 3, Bloomsburg	Aug. 31, 1951	
Harvey, Allen R., R. D. 2, Bloomsburg	Aug. 31, 1950	
Minnich, John H., R. D. 1, Catawissa	Aug. 31, 1950	
Smith, Donald R., R. D. 3, Bloomsburg	Aug. 31, 1951	
CRAWFORD		
Carter, Oliver R., Spartansburg	Aug. 31, 1950	
CUMBERLAND		
Burkart, Jesse W., 15 N. Penn Street, Shippensburg	Aug. 31, 1950	
Crawford, Clarence M., R. D. 2, Gardners	Aug. 31, 1951	
DAUPHIN		
Bostdorf, Lionel E., R. D. 1, Dauphin	Aug. 31, 1950	
Houck, Harry D., R. D. 2, Elizabethtown	Aug. 31, 1951	
Miller, Glenn L., 1815 North Street, Harrisburg	Aug. 31, 1951	
Miller, Walter J., 888 High Street, Enahaut	Aug. 31, 1950	
Petroskie, Demetri J., 162 N. 15th Street, Harrisburg	Aug. 31, 1951	
Plank, William F., 209 32nd Street, Paxtang	Aug. 31, 1950	
Scott, William H., 353 S. 15th Street, Harrisburg	Aug. 31, 1951	
Wiley, Harold L., 4 N. Duke Street, Hummelstown	Aug. 31, 1950	
ERIE		
Farnham, James E., R. D. 3, Wattsburg	Aug. 31, 1950	
Rekitt, Alfred, R. F. D. No. 3, Union City. Killing a ring-neck pheasant in close season	Aug. 31, 1951	

FAYETTE

Angel, Joseph R., R. D. 3, Box 239, Uniontown	Aug. 31, 1950
Fant, Dupree, Box 183, McClellandtown	Aug. 31, 1954
Fowler, George E., R. D. No. 1, Uniontown. Killing a doe deer in close season	Aug. 31, 1951
Kefover, Jesse L., Box 52, Brownfield	Aug. 31, 1950
Lee, Raymond R., R. F. D., Farmington. Possessing doe deer taken in close season	Aug. 31, 1951
Mohnackie, Paul E., 35 Miller Avenue, Uniontown	Aug. 31, 1951
Russell, George O., Box 167, Lemont Furnace	Aug. 31, 1950

FRANKLIN

Sellhamer, Roy E., R. D. 5, Chambersburg	Aug. 31, 1950
Wilhide, Carroll E., R. 1, Waynesboro	Aug. 31, 1950

FULTON

Himes, Jimmy D., Defiance	Aug. 31, 1951
Hunter, Gilbert W., McConellsburg	Aug. 31, 1950

HUNTINGDON

Bousum, Helen H. (Mrs.), Box 51, Mill Creek	Aug. 31, 1950
Waite, Eugene E., R. D. 1, Alexandria	Aug. 31, 1950

INDIANA

Miller, John C., R. D. No. 1, Cherry Tree. Killing a doe deer in close season	Aug. 31, 1951
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JEFFERSON

Bennett, Robert A., 117 Shaffer Street, Sykesville	Aug. 31, 1952
Kennedy, William A., R. D. 2, Brookville	Aug. 31, 1950

JUNIATA

Gloss, Willis H., East Waterford. Possessing deer meat taken in close season	Aug. 31, 1951
Imes, Harold N., Doyles Mills	Aug. 31, 1950
Zimmerman, Marlin H., R. D. 1, Mifflintown	Aug. 31, 1950

LACKAWANNA

Burattini, Terso J., 938 Throop Street, Dunmore	Aug. 31, 1954
Rutkauskas, Walter, 2910 Marvine Avenue, Scranton	Aug. 31, 1951
Spangenberg, Edward B., 307 Dundaff Street, Carbondale ..	Aug. 31, 1951

LANCASTER

Bradley, Robert S., R. D. 1, Lititz	Aug. 31, 1951
Derstler, Amos G., 24 E. Ferdinand Street, Manheim ..	Aug. 31, 1954
Gantz, Arthur, 32 Railroad Street, Mt. Joy	Aug. 31, 1951
Gundel, George A., 647 Locust Street, Columbia	Aug. 31, 1950
Hashinger, Jr., Fred B., 19 Landis Avenue, Millersville ..	Aug. 31, 1951
Lorah, Raymond P., 423 N. Queen St., Lancaster. Hunting in a safety zone	Aug. 31, 1952
Parmer, Lloyd E., R. D. 2, Narvon	Aug. 31, 1950
Parmer, Richard B., R. D. 2, New Holland	Aug. 31, 1952
Shober, Clifford L., R. D. 2, Denver	Aug. 31, 1951
Toner, Ronald J., 456 Locust Street, Columbia	Aug. 31, 1951
Wright, Jay C., Broad Street, New Holland	Aug. 31, 1951

LAWRENCE

Robinson, Charles R., R. D. 2, New Castle	Aug. 31, 1951
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LEBANON

Gensler, Jr., Irvin M., 510 Church Street, Lebanon	Aug. 31, 1951
Stoudt, Harry E., R. D. 3, Lebanon	Aug. 31, 1951

LEHIGH

Arner, Ralph C., 627 Greenleaf Street, Allentown	Aug. 31, 1952
Traylor, Samuel W., 1446 Hamilton St., Allentown. Using a vehicle to hunt and kill game	Aug. 31, 1951

LUZERNE

Clarke, Patrick J., 59 Cooke St., Ashley. Setting trap closer than 25 feet from established beaver dam, contrary to Commission's regulations	Aug. 31, 1952
Dempkowski, Stanley, R. D. 1, Mountain Top	Aug. 31, 1951
Kupeck, Victor J., 354 W. Sixth Street, West Wyoming ..	Aug. 31, 1951
Mackiewicz, Raymond J., 11 Third Street, Larksville ..	Aug. 31, 1951
Madrots, Frank, 64 Miner Street, Hudson	Aug. 31, 1951
Patterson, Stanley D., 702 Donnelly Street, Durysa	Aug. 31, 1951
Pietrzyk, Frank J., 34 Railroad Street, Alden Station, Nanticoke	Aug. 31, 1951

LYCOMING

Fulkrod, Jay P., Star Route, Jersey Shore	Aug. 31, 1954
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McKEAN

Himes, Gary W., R. D. No. 4, Smethport. Fishing in a State Game Refuge	Aug. 31, 1952
Louk, Russell J., 6 McClellan Place, Bradford	Aug. 31, 1954
Perry, Todd S., Kings St., Eldred. Attempting to collect bounty on five foxes taken in another State, namely, New York	Aug. 31, 1951
Russell, Ray R., R. D. No. 2, Eldred. Possessing parts of a deer taken in close season	Aug. 31, 1951
Yale, Zane A., R. D. No. 4, Smethport. Fishing in a State Game Refuge	Indefinitely

MERCER

Curry, Richard L., R. No. 6, Mercer	Aug. 31, 1950
Hassel, John D., R. 1, Reynolds Village, Transfer	Aug. 31, 1950
Means, Harry L., 818 S. Oakland Street, Sharon	Aug. 31, 1950
Vaughn, George D., R. 2, Greenville	Aug. 31, 1950

MIFFLIN

Harmon, James L., 521 Woodland Avenue, Lewistown	Aug. 31, 1951
Rager, Jr., Charles J., R. D. 1, Millroy	Aug. 31, 1950
Sterrett, Brice W., 120 N. Wayne Street, Lewistown	Aug. 31, 1950

MONROE

Possinger, Norman L., Reeders	Aug. 31, 1954
Sheler, Hollis D., Box 53, Broadheads ville	Aug. 31, 1951

MONTGOMERY

Gallagher, James D., 453 E. Warton Road, Glenside	Aug. 31, 1950
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MONTOUR

Leiby, Clarence J., R. D. 6, Danville	Aug. 31, 1950
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NORTHAMPTON

Schaadt, Sr., William L., R. D. 1, Nazareth	Aug. 31, 1950
Thomas, Jr., Morgan J., R. D. 2, Bangor	Aug. 31, 1951

NORTHUMBERLAND

Janaskie, Walter J., 827 W. Linn Street, Shamokin	Aug. 31, 1951
Rotiski, Robert F., 324 Webster Street, Ranshaw	Aug. 31, 1951

PERRY

Shunk, John D., R. 1, Duncannon	Aug. 31, 1950
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PHILADELPHIA

Fisher, Marcus K., 459 Parker Avenue, Roxborough	Aug. 31, 1951
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SCHUYLKILL

Dabashinsky, Joseph B., 436 Adams St., Pottsville. Killing rabbit in close season	Aug. 31, 1951
Dillon, John J., 600 Glenwood Avenue, Tamaqua	Aug. 31, 1959
Heffron, Joseph A., R. D. Box 302, Duncott	Aug. 31, 1951
Wagner, Kenneth E., 301 E. Grand Avenue, Tower City ..	Aug. 31, 1951

SNYDER

Perkinson, Kenneth E., R. D. 2, Selinsgrove	Aug. 31, 1951
Shillingsford, Kenneth L., 312 N. Market Street, Selinsgrove	Aug. 31, 1950

SOMERSET

Garlesky, Joseph J., Seanor	Aug. 31, 1950
Knisely, Franklin W., R. D. 1, Sand Patch	Aug. 31, 1950

SUSQUEHANNA

Benson, William N., 419 Laurel Street, Susquehanna	Aug. 31, 1951
Birchard, Gene R., R. D. 1, Birchardville	Aug. 31, 1951
Figura, Sergius, R. D. No. 2, Thompson. Setting one beaver trap with trap tag below the ice or waterline	Aug. 31, 1950
Senercool, Harold L., R. D. 1, Springville	Aug. 31, 1951
Snyder, Jr., Edward R., 406 Church Street, Susquehanna ..	Aug. 31, 1951

TIOGA

Kent, Phillip H., Jr., Box 46, Cowanesque. Shooting within 150 yds. of an occupied building	Aug. 31, 1951
Mould, Charles G., R. D. 7, Wellsboro	Aug. 31, 1951

UNION

Brumgard, William H., 4th & Market Streets, Lewisburg ..	Aug. 31, 1951
Reed, Ronald A., R. D. 2, Lewisburg	Aug. 31, 1951

VENANGO

Baum, Kenneth C., R. D. 1, Oil City	Aug. 31, 1950
Hynes, Robert L., 81 Grove Ave., Oil City. Hunting deer in close season	Aug. 31, 1951
Jack, Karl, Van	Aug. 31, 1951
Wurster, Junior L., North Side, Star Route, Oil City. Hunting deer in close season	Aug. 31, 1951

WARREN

Stanton, John H., Box 105, Russell	Aug. 31, 1950
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WASHINGTON

Lemonakis, Manuel, 503 Blaine Avenue, Canonsburg	Aug. 31, 1952
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WESTMORELAND

McCann, Robert B., 706 Alexander Street, Latrobe	Aug. 31, 1951
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WYOMING

Drake, Richard G., Church Street, Factoryville	Aug. 31, 1951
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NON-RESIDENT

Flowers, James P., 906 High Street, Youngstown, Ohio	Aug. 31, 1951
Taylor, Fred, Hartford, Conn. Hunting without non-resident license	Aug. 31, 1951
Terlizzo, Ernest, 150 Spruce St., Stamford, Conn. Possessing doe deer taken in close season	Aug. 31, 1950
Wilson, William H., 220 Peabody Avenue, Lyndhurst, New Jersey	Aug. 31, 1951

THE FINISHED GUN DOG—from Page 22

Retrieving is essential in gun dog perfection, and the dog that "seeks" dead game persistently, accurately, and proudly "fetches" it to his master in a prompt and tender manner, is truly a joy to behold.

The perfect shooting dog is a gentleman in every true sense of the word. He is house and car broken, and causes no embarrassment when his master hunts in localities away from home, where frequently the dog must stay in hotels, lodges, or camps. Taught from puppyhood, he is not jealous nor noisy, and remains quiet and content wherever the handler sees fit to place him. Of course, he has never forgotten his early lessons on "coming to heel." He honors his brace mate's point instantly on sight, or at command, and "backs" with the same style as if he were on game himself.

The dog of proven excellence is always obedient. He may be a perfect beauty, possess all the characteristics of perfection in handling game, but he cannot be classed as a finished dog unless he handles to his master's command. He responds immediately and with pride, because he knows the handler will make his hunting more pleasurable. From puppyhood he has learned brief simple commands, and responds to them without hesitation, and he has been made to realize that his purpose in life is to serve his master to the best of his ability, and he fulfills his mission gladly.

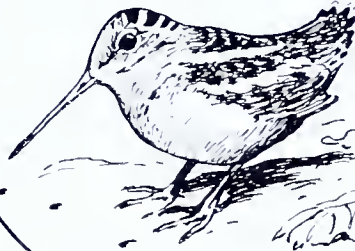
A well trained finished dog is a treasure well worth the time, money, patience, and effort required for his thorough field education.

1949 PENNSYLVANIA UPLAND HUNTING SEASONS

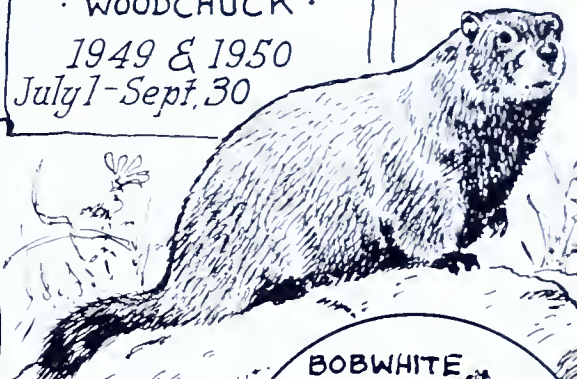
• GREY
SQUIRREL •
Nov 1 - Nov 26



• WOODCOCK •



• WOODCHUCK •
1949 & 1950
July 1 - Sept. 30

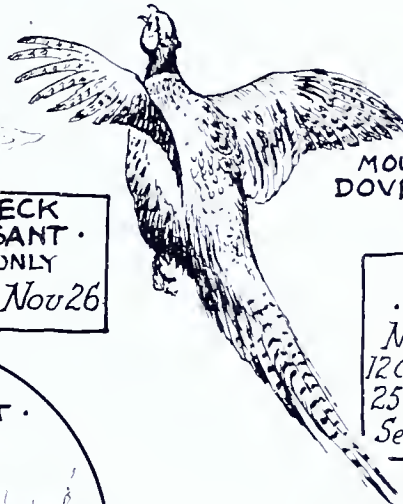


BOBWHITE
QUAIL •
Nov 1 -
Nov 12



• RACCOON •
Nov 1 - Feb 1 1950
Season Limit 35

• RINGNECK
PHEASANT •
COCKS ONLY
Nov 1 - Nov 26



MOURNING
DOVE



• WILD
TURKEY •
Nov 1 - Nov 26
12 Counties Restricted
25 Counties Closed
Season Limit 1



• BLACK
BEAR •
Over 1 Year Old
Nov 14 - Nov 19



• COTTONTAIL
RABBIT •



Nov 1 - Nov 26

• WHITE - TAILED
DEER •
Bucks with 2 or
more points to
one antler
Nov 28 - Dec 9
(Antlerless Deer
Statewide)
Dec 10 only
1 Deer Per Person
Either Sex



• RUFFED
GROUSE •
Nov 1 - 2 - 3 -
10 - 11 - & 12



• SNOWSHOE
RABBIT •
Dec 19 - Jan 2 1950



JACOB
BATES
ABBOTT

IT'S YOUR PENNSYLVANIA -- IT'S YOUR PENNSYLVANIA RIFLE

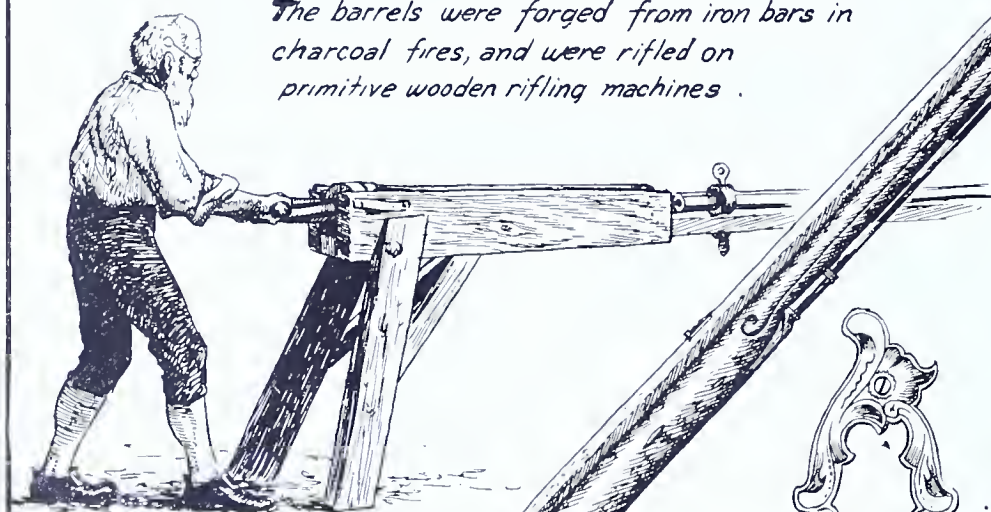


the Pennsylvania Rifle

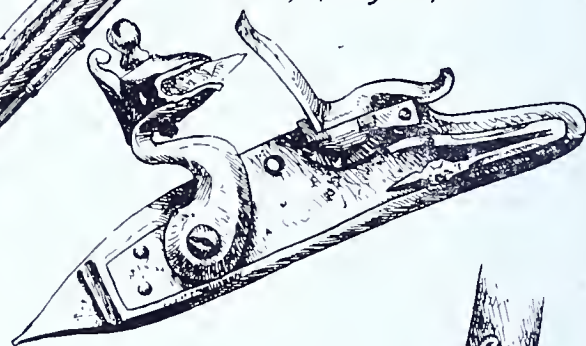
Although known for years as the "Kentucky Rifle", the celebrated long rifle of muzzle-loading days was developed in Lancaster County, Pa., &

built chiefly in the shops of such Pennsylvania gunmakers as the Henrys, John Armstrong, Mathew Roesser, N. Beyer, the Lemans, D. Cooley, Henry Koons, John Moll, the Dreppards, Philip Lefevre, the Zorgers & others.

The barrels were forged from iron bars in charcoal fires, and were rifled on primitive wooden rifling machines.



Early locks were entirely hand-made—down to the smallest screws, springs & pins.



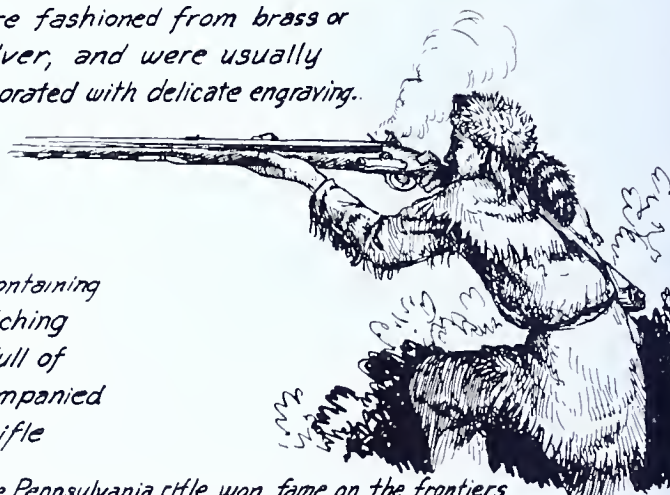
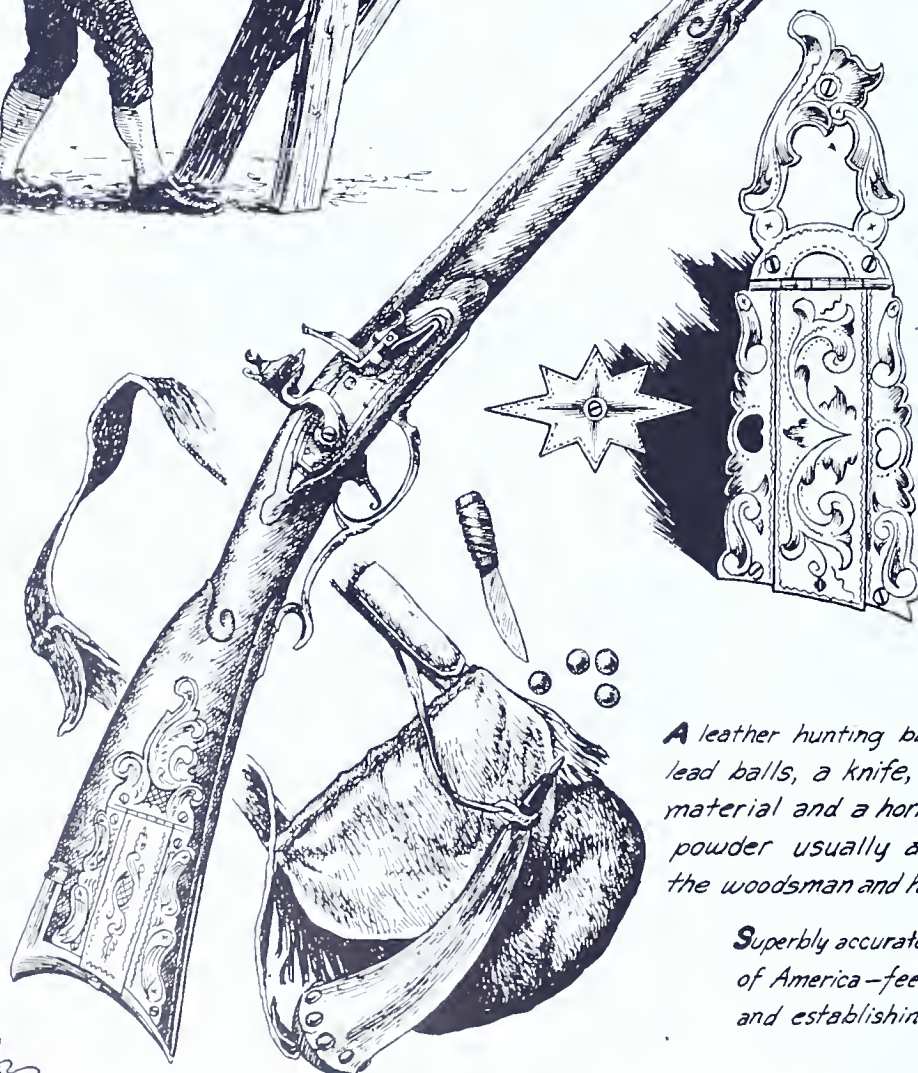
Stocks were made of native maple, carefully selected for beauty of grain. Many were embellished with intricate carved designs...



Patchboxes, thimbles, butt plates, trigger guards and the various inlays found on the long rifles were fashioned from brass or silver, and were usually decorated with delicate engraving.

A leather hunting bag containing lead balls, a knife, patching material and a horn full of powder usually accompanied the woodsman and his rifle.

Superbly accurate, the Pennsylvania rifle won fame on the frontiers of America—feeding hungry mouths, defending pioneer homes and establishing the freedom of the Colonies.



© Stanley Smith

PENNSYLVANIA WEEK OCTOBER 17 - 24

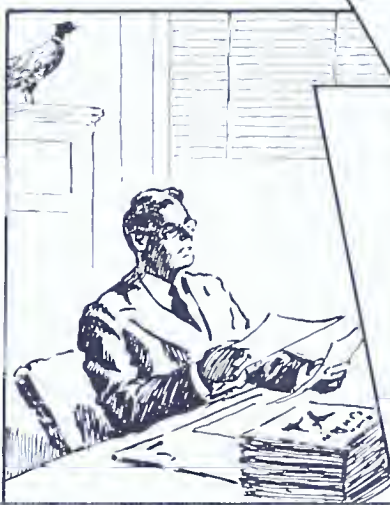
PENNSYLVANIA Game News



38.34

NOVEMBER 1949

TEN CENTS



The GAME NEWS

WILLARD T. JOHNS, JR.
Editor



PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR

*

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	Name	Address		Current Hunting License No.
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IMPORTANT—The Game Law requires FIVE OR MORE PERSONS (including separate hunting parties who com
maintain this roster with the captain or leader of the party. In addition, a copy of the roster must be posted at t
Each member of the hunting party shall be liable to a penalty of \$25 for failure to maintain, post or produce
roster posted at party headquarters must remain so posted for thirty (30) days after the close of the season.

Hunting Season 01 194.....

County

Captain or Leader

[illegible]

bine) hunting together for big game, or in any manner co-operating with each other for such hunting, to at all times be headquarters of the party, to be plainly visible for inspection from the outside by a Game Law enforcement officer.

ALL INFORMATION REQUIRED ON THE ROSTER MUST BE COMPLETED.—The this required roster or record.

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PRIVILEGES CARRY RESPONSIBILITIES

In keeping with an American heritage that dates from the time of the earliest settlers, it is our privilege to hunt and trap wild birds and animals in Pennsylvania. No matter who we are or what our position in life, the purchase of a hunting license grants us the freedom to enjoy a great outdoor sport in a thickly populated State of eleven million people, small in area, highly industrialized and known to all as the "Workshop of the World!" Yes, we can still enjoy our sport to the utter amazement of many people of the world.

The trouble with too many hunters today is that they enjoy the privileges without accepting the corresponding responsibilities to perpetuate our sport. They side-step the obligations so recently defined in a *Hunter's Manual* issued by the State of New York which tells them it is their responsibility—

to hunt without injury to themselves or others

to hunt without harm to another's property

to hunt without harm to the sport of another

to hunt without harm to the future game crop

to hunt without causing undue suffering to a living creature

The men and women of future generations are entitled to the pleasures and benefits we in Pennsylvania derive from our hunting and trapping. It is our responsibility and our duty to preserve and perpetuate them. Our actions, courtesies, and efforts—our willingness to give so that we may receive—will determine the future of hunting and trapping in our great Commonwealth.

If we are to continue to enjoy our privilege, we must likewise accept our responsibilities! May each accept his share and thus preserve for us and posterity this grand American heritage—the privilege we enjoy today!



SPORTSMEN'S QUIZ--

Conducted by
DON SHINER

1. It is a definite scientific fact that deer have gall bladders?

- a. True
- b. False

2. The hunter who has bagged a wild turkey knows it is one of the wisest of all game fowls. However, the turkey, like the crow and duck, can be lured to the hunter by imitating its calls?

- a. True
- b. False

3. This plant when in bloom is one of the wonders of the woodlands. Outdoorsmen will know it as:

- a. dogwood
- b. laurel
- c. holly
- d. sumac

4. The weasel is a skillful climber, darting along the limbs of trees with the skill of a squirrel.

- a. True
- b. False

5. In general structure and in the character of the teeth, the muskrat is simply a great mouse. However, it actually belongs to the same family as the beaver.

- a. True
- b. False

6. The rings found on the end of a log or stump indicate the age of the tree.

- a. True
- b. False

7. Disturb the home of the hornet and you are sure to receive some painful stings. The hornet, like the honey bee, leaves its sting in the wound.

- a. True
- b. False

8. This track in the snow can easily be recognized as that of a—

- a. weasel
- b. crow
- c. fox
- d. rabbit

(Answers on Page 24)





DIARY OF A SMALL GAME HUNTER

By ROBERT L. RINEARD

Tuesday, November 2, 1948—After weeks of preparation and planning. I was here at last. The cabin looked like a lonely sentinel and the air was damp and raw.

A quick glance told me that squirrel hunting would be hindered slightly due to quite a few leaves still clinging to the trees. To be sure, another cool wet day was in store for us. "Us" being my dad and my uncle who were most kind to help me get situated for my stay until December.

In no time at all, my food and equipment was unpacked and stored inside the cabin, the fires were soon roaring and the cabin took on an air of comfort in place of the heretofore chilly, damp, abode.

My dad and uncle, however soon hurried me outside. Since I had all month to get myself organized, and they had only a few hours to hunt before going back to Harrisburg, we hunted.

Although we did not sight much game, my uncle shot one rabbit which satisfied him, and I shot one squirrel which more than pleased me. We saw one hen pheasant and two rabbits, and I took a long shot at a crow, but he merely "cawed" his defiance, hurried out of range, then assumed his slow normal flight once again.

Soaked to the skin, we retired to the comfort of the cabin, ate our lunches and dried out some of our clothes. At about three o'clock, dad and uncle decided it was time to head for home.

No sooner had they gone than I began to get some necessary things done. The first thing was wood detail. Large logs for the chunk stove in the room, and slab wood for the cook stove in the kitchen.

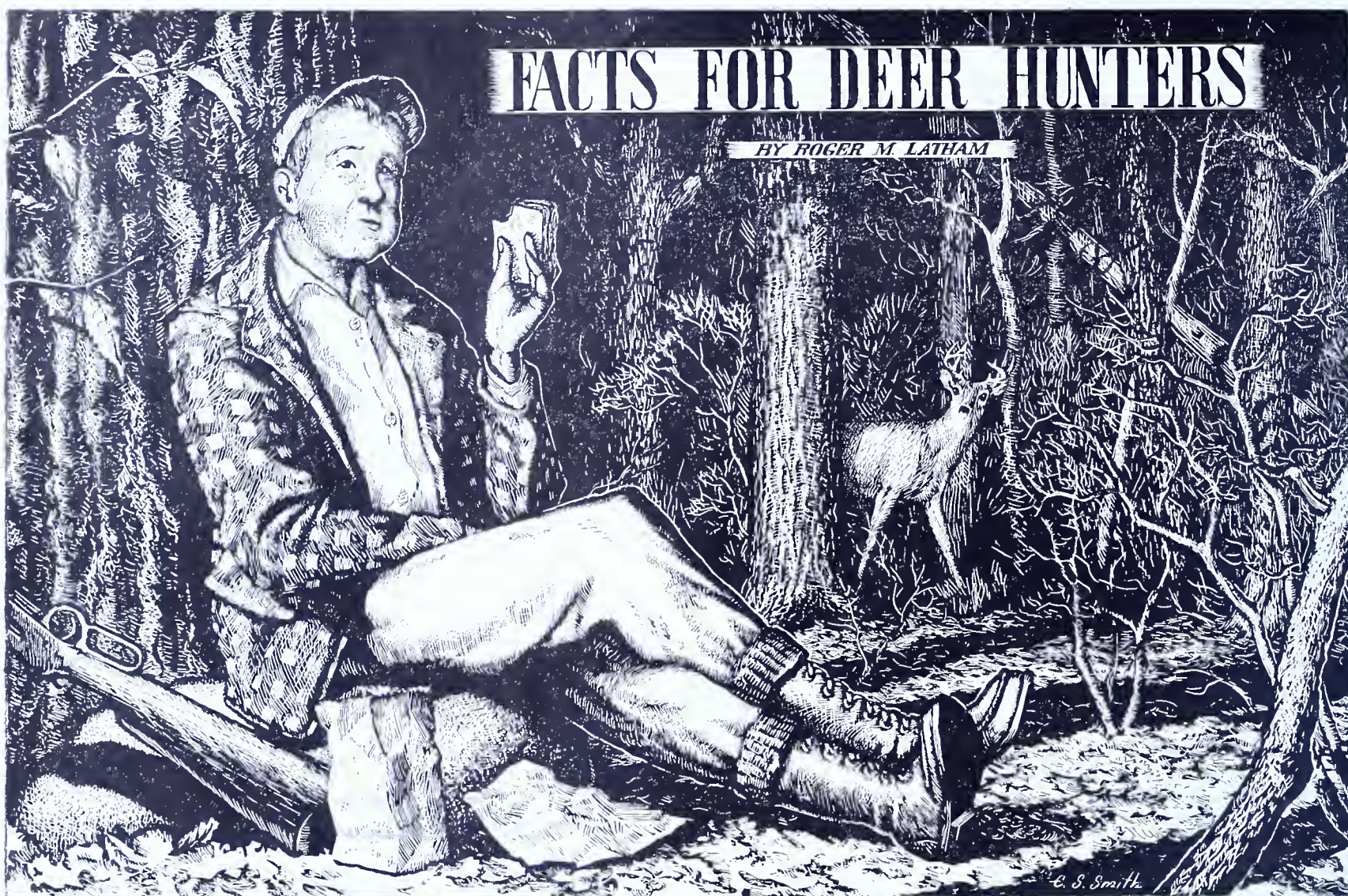
Fresh water from the well, filling the oil lights and bed making came next on the program; then I began to unpack my duffle.

The first aid station was set up on the kitchen shelf in easy reach. It included the necessary burn ointment, tourniquet, triangular bandage, steri-pads, cotton, iodine, smelling salts, sterilized knife, scissors, tweezers, and forceps.

The above mentioned items, used with reasonable forethought, and common sense could, in case of emergency, save a lot of pain, and perhaps a life—who knows.

(Continued on Page 26)





THE purpose of this article is not to give a detailed technical discussion on the life history and habits of deer, but instead to point out some of the outstanding characteristics and peculiarities of this animal.

The deer hunters living in the larger cities and non-forested regions of the state have little opportunity to observe and learn about deer except when they travel to the "big woods" counties for a few day's hunting. Each year several hundred men and boys go into the forests, complete novices in the sport of deer hunting. These tyros usually have their heads filled with ideas and advice, good and bad, which leave them utterly confused. It is for these hunters that this article is intended.

For the most practical value the writer feels that this article should be divided into two parts: (1) a generalized life history and (2) a collection of facts dealing mainly with the actual hunting of deer and the dispellation of many wrong ideas and fancies that deer hunters have.

LIFE HISTORY

Fawning

Probably 95 per cent of all fawns are born during May and June. However, it has been proved that with the present unbalanced sex-ratio (too many females per male) fawning occurs three times a year. This abnormality appears only when the number of females per male is so badly out of balance that a certain number of does are not bred during their normal oestrous cycle in October and November. The cycle recurs again in January or February and, if bred at that time, the does will fawn in

September—the gestation period being about 210 days. A relatively small number may breed in June or July, and the fawns are then born in January. Needless to say, fawns born in January die almost immediately or are born already dead. Those arriving in September have little chance to live through the winter, particularly under the present unfavorable range conditions in Pennsylvania. This explains the occasional tiny fawn weighing fifteen to twenty pounds which may be shot during antlerless deer seasons. Persons killing these very small deer are often criticized and ridiculed by other hunters, but their deed is really an act of mercy as the chances are extremely likely that the same fawn would die a lingering death from malnutrition before the winter had passed.

With optimum range conditions, does older than yearlings will regularly give birth to twin fawns, and triplets are not uncommon. Only a small percentage of does produce a fawn the first year, and, if they do, it is invariably a single. Normally the sex ratio of fawns produced will be one male to one female.

A few years back when browse conditions in Pennsylvania were nearly ideal for deer, most does observed in early fall would be accompanied by twin fawns. At present on our overbrowsed range, it is the exception rather than the rule to see twins, and each year a greater number of does produce no off spring. This abnormal reduction of the fawn crop may be caused by (1) an insufficient number of bucks to breed all of the does successfully; (2) the death and subsequent resolution of one or both em-

bryos during the "crisis" period of late winter; or (3) the death of fawns following birth because of inadequate nutrition provided by the malnourished parent. Probably all three contribute to the total reduction, but underlying all of these factors are the problems of too many deer for the amount of natural browse and the unbalanced sex ratio.

At birth fawns will weigh from four to seven pounds and are able to stand and walk about within twenty-four hours. For the first few weeks the fawn follows its mother very little. In the early morning the doe places her young where it will be in the shade and resumes her foraging alone. Most fawns will be found in the open woods, usually with no grass, brush, or other cover hiding it.

It is during this time each year that a great number of fawns are picked up by people who happen to find them in the woods. Almost without exception these persons believe the fawn is lost or is an orphan simply because they do not see the mother with it. As explained before, the tiny fawn does not follow its mother about but lies in one spot most of the day and is visited by the parent only at "feeding" times. It is ridiculous to think that the fawn is lost, and even if it did stray the mother could locate it readily by means of her highly-developed sense of smell. The Game Law provides a fine of twenty-five dollars for picking up these "babies of the wild."

For about the first four months fawns keep their spots, but these gradually disappear and are replaced by the gray winter coat during September and October. All

deer have two regular periods when the old hair is shed and the new grown. The thin red coat of summer appears in April and May and is replaced during September or October by the heavy gray pelage of winter.

A fawn born in a section where natural food is abundant should weigh 70 to 85 pounds live weight by December 1. However, under poor food conditions fawns will average only 45 to 60 pounds. During the 1938 antlerless deer season, 72 fawns were weighed on a 40-square mile sample area in Lycoming County. In small localized sections of this region food conditions were good, but as a whole the browse supply could only be classed as poor to fair. The largest of the 72 fawns weighed 67 pounds hog-dressed and the smallest 18 pounds. On the average, the hog-dressed weight of deer is 79 per cent of the live weight. Thus, the 72 fawns averaged about 60 pounds live weight and 48 pounds hog-dressed.

The growth of deer from birth to maturity is regulated almost entirely by temperature and the amount and quality of food obtainable. Most deer, fawns included, will weigh more on December 1 than they will the following April 1, even though in the case of fawns their age has almost doubled. The growing period of deer, therefore, is confined almost entirely to the seven warmer months from April to December in northern states. An inadequate food supply during the first fall and winter causes fawns to become stunted and these individuals never attain normal size regardless of the amount and quality of the food in future years.

Antler Growth

Hunters have many set ideas concerning the growth of a deer's antlers. Many believe that all 18-month old bucks are spikes, all 30-month bucks are four points, all 42-month bucks are six points, etc. Experiments have shown that the size of deer antlers and the number of points are not directly dependent upon age but rather upon the amount and quality of food that the animal had during the period when its antlers were developing. If well fed, about 85 per cent of all 18-month bucks should produce antlers with a total of three or more points. *In other words, 85 per cent of these young bucks should be legal in Pennsylvania the first year they grow a set of antlers. And even more surprising to most hunters will be the fact that about 40 per cent of these yearlings will have six to ten points.* However, over much of Pennsylvania's deer range there exists both a qualitative and quantitative deficiency of food because of overbrowsing and overcrowding. Thus, instead of the percentages listed above, about 50 per cent of these young deer will have spikes the first year, and most of the legal racks will be scrubby three and four pointers.

The antlers of an adequately-nourished deer are likely to increase in weight each year for the first few years, remain nearly constant for a few more years, and then, as the buck reaches "old age," begin to diminish in size until finally they may become spikes or barely visible knobs. Spikes of an old deer are generally much darker, heavier, and rougher than those of a young deer and usually lack sharp points.

A "button buck" is a six-month old buck (in hunting season) and receives this name from the small, unpolished horns which seldom reach above the hair on the head. Except for the extreme points in a few cases, the button is entirely covered with hair. A buck of this age is legal during antlerless deer seasons.

Deer shed their antlers and grow a complete new set each year. The antlers may be dropped anytime between late November and early May depending upon the physical condition of the individual animal. Poorly fed deer, or those with some disease or ailment, are likely to lose their antlers in November or December. Those having an abundance of good browse may retain their antlers until April or May. Extremely cold weather appears to have little effect upon the retention or loss of antlers as whitetail deer in Canada and Maine where low temperatures are common usually lose their antlers later than the average for Pennsylvania.

When the antlers are shed, the right one often drops first and the left one may be carried several days longer. About 30 per cent of the legal deer killed have an odd number of points, and of this number about 60 per cent have more points on the left antler than on the right.

A deer which loses its antlers in December may begin its new growth by March 1 or earlier, but the development is so slow that deer which shed as late as April or May will be the first to rub out of the velvet in the fall. Growth and ossification both occur from the head outward, and the antlers harden from the base to the tips throughout the growth period.

From the beginning and throughout most of the summer, the tips of the new growth are soft and fleshy, and horse flies, deer flies, and black flies will feed upon the blood. Short, soft, dark-brown hairs which resemble velvet cover the entire antler during growth, thus giving rise to the common reference "in the velvet." During September or earlier, growth is completed and the entire antler becomes fully ossified. As soon as this hardening process is completed, the bucks begin the polishing procedure which removes the velvet in long shreds and makes the points smooth and shiny. This rubbing is done for the most part on small saplings up to three or four inches in diameter. The buck will stand for long periods at a time scraping his antlers up and down the trunk of the sapling until the bark may be removed around the entire circumference. These rubbing trees may be located almost anyplace, but more are found along the edges of clearings and near streams than farther back in the forests. Bucks will often pull the strips of velvet from their antlers by reaching up and twisting them in the branches of a hawthorn or other tree.

Deformed antlers are caused by an injury during the period of development. If the new "sprout" is deeply cut when only a few inches long, the split is likely to produce a double antler on that side. A bad bruise may result in a flat, fan-like distribution of the points. Occasionally a deer may have one or both of its antlers infested with warbles. These live inside the antler while it is in the velvet, and, when these insects drop free, a fissure or hole remains in the hardened antler.





When rubbing is completed and the rutting season approaches, the bucks become fighting-minded and many heroic battles take place, with perhaps only a doe or two as spectators. These fights decide the supremacy of one buck over another, and the winner mates with the one or more does comprising the harem. Any attempt by the beaten buck to mate with a doe is prevented by the new boss.

A fight between two large bucks is an awe-inspiring spectacle. A combination of extreme strength and speed is exhibited by few other animals. Much like the strutting of game cocks prior to a fight, the bucks erect the hair on their bodies, lay their ears back flat on their necks, and walk slowly and stiff-leggedly sideways toward their adversary. Suddenly they lunge at each other, and their antlers come together with a loud crash. They may immediately break and go through the same procedure time after time until one is knocked down or weakens. Other times they will leave their antlers locked and push with all their strength in an attempt to push the other off its feet or down on its knees. Deer are quick to recognize superior strength or to realize they are being bested, and, when this realization comes, they are not too proud to turn tail and run. For this reason very few are killed while fighting. Occasionally the antlers of two bucks will become so badly interlocked during a fight that they cannot separate themselves and death from slow starvation results.

Most bucks shot during the hunting season with one or more points broken off have lost them while fighting.

Antler spread is measured with calipers from the outside of one to the outside of the other at the point of greatest width. In Pennsylvania a deer with a spread of over 18 inches is considered a very nice trophy. Spreads up to two feet are not uncommon, but the average for legal bucks at present in the state will be about 15 inches. The record head for Pennsylvania has a spread of 27 inches.

Food Habits

A knowledge of the food habits of deer will often aid the hunter in locating these animals. The diet of deer is composed chiefly of browse and mast. Browse in summer consists of innumerable grasses, herbs, shrubs, leaves, etc. During this period of the year there is no shortage of food, but browse may be limited during winter and early spring. In winter, the tender sprout growth and tips of twigs of a great variety of trees and shrubs are eaten and the bark of a few species, particularly Hercules' club, may be peeled. Teaberry, laurel, rhododendron, hemlock, and other evergreens are consumed in some quantity. It is desirable for the deer hunter to know the true value of different types of browse, so that when the Game Commission finds it necessary to declare an antlerless season because the food supply is insufficient for the size of the herd, he will not feel that they are mistaken in their conclusions simply because he sees large quantities of certain evergreens such as laurel and rhododendron in the forests. These browse species, although eaten in some quantity, lack the necessary nutrients to even keep a deer alive over a period of three or four weeks without some other supplementary food. Of the many browse species utilized by deer, the red, or soft, maple is probably the most valuable one in Pennsylvania. Aspens, dogwoods, black gum, hobble-bush, sassafras, and many other trees and shrubs provide palatable and nourishing browse for deer. Because much of Pennsylvania's deer range has been badly over browsed, the twigs and sprouts of nearly every species of tree and shrub are now browsed to a greater or lesser extent, even such non-succulent growth as found on the oaks, the chestnut, the beech, and others.

The two most important mast crops in this state are the acorns and beechnuts. Deer will search for and feed upon these nuts, when available, during the entire winter, pawing down through the snow and leaves to secure them. The loss of the chestnut was a decided blow to the successful management of our large deer herd as it caused an increased pressure upon the ever-diminishing browse and thus resulted in a drop in the carrying capacity of the range.

Open springs and streams provide another source of food during the winter months in the form of water plants. The various weeds and aquatics growing in and along streams are readily eaten by deer, particularly when the ground is covered with snow.

Toward the latter part of December or in early January, depending somewhat upon the severity of the winter, the deer leave the mountain tops and converge into the valleys where they stay until late March. It is during this period that the winter mortality occurs. The deer are bunched in the small valleys and the available browse is soon depleted, and even over an average winter many of the smaller and weaker individuals may die of malnutrition. During severe winters, as the 1935-36 one, thousands of deer died over the state. During March and April, dozens of deer may be found along the mountain streams where they have stayed and died in spite of the fact that there may have been a relative abundance of food on top of the mountain not more than a half mile away. Many hunters in condemning the antlerless deer seasons do

not take this fact into account and feel that the Commission has erred in its statement concerning the scarcity of deer food and the subsequent necessity for thinning the herd.

After a heavy concentration of deer have wintered in a valley and have eaten the available browse, a condition known as a "deer line" results. The deer browse as high as they can reach standing on their hind feet which leaves a space five feet, or more, high practically devoid of any green twigs, sprouts, or evergreen leaves. This deer line is most noticeable in hemlock, laurel, or rhododendron thickets.

Deer feed at more or less regular intervals during the entire day and night. They are more active at night and range considerably farther, but there are several periods each daytime when the deer move about and feed. The length of the feeding periods are controlled by the abundance or scarcity of food and may vary from twenty minutes to two hours or longer. After the deer's hunger is satisfied, they will lie down until they again feel the urge to feed.

Size of Deer

A few remarks concerning the size of deer should be of value to many deer hunters. The average hunter is inclined to overestimate the weight and shoulder height of deer. Employees of the Game Commission who have weighed deer during open seasons in various parts of the state find that the hunters almost invariably estimate the weight of a deer that they have shot far above the actual. Especially during doe seasons, these guesses may be double the true weight.

A few hints may aid in estimating weight more nearly correctly. During antlerless deer seasons there are four general types killed; (1) button bucks, which are fawns of that year; (2) female fawns of that year; (3) yearling and adult does; and (4) yearling and adult bucks which have either already shed their antlers or did not grow ones of sufficient height above the hair to be classed as "spikes." Numbers 1 and 2 will rarely weigh more than sixty pounds hog-dressed and will average between forty and sixty pounds. Many of this age will weigh from 30 to 40 pounds. Number 3 class has a maximum of about 125 pounds, with few over 110 pounds, and an average between 75 and 90 pounds. Does weighing over 125 pounds

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SAVE THE CUBS

EVER since 1925 when cub bears were first protected in Pennsylvania, the Game Commission has conducted a vigorous educational campaign to save them. Through posters, newspaper releases, radio programs, and all other available media, the identifying characteristics of mature and immature animals have been forcibly called to the attention of hunters.

Yet, in spite of all this publicity, there are just too many hunters afield today who have little or no conception of how large the legal bear must be. This is especially true to an inexperienced eye looking over the sights of a high-powered rifle.

Last year 478 bears were killed in Pennsylvania—388 legal and 90 illegal cubs. The year before 643 bears were killed—569 legal and 74 illegal cubs.

Cubs as a rule travel with a female during the open hunting season and are easily recognizable through comparison of the size of the two ani-

mals. However, the situation is entirely different if the mother is killed. Then cubs are no longer supported and protected by the "woods-wise" and "man-shy" guidance of the mother and are apt to wander aimlessly through the forests, thus becoming easy targets for the hunter who doesn't think or care about his future sport.

It is true that most offenders are eventually apprehended and may pay a substantial penalty for their indiscretion. The last session of the Legislature passed a law increasing this penalty from \$100 to \$200 in order to emphasize the seriousness of the situation. However, the fine itself does not bring back to life the potential breeders necessary to maintain a bear population at or near the same level for the following years. We can't hope to kill both the adults and their young and continue to harvest a fair crop annually.

If you have trouble judging the size of a bear in the woods, remember this: Don't shoot at anything but a BIG BEAR! Let the little fellows grow up!

LOOK BEFORE YOU SHOOT! SAVE YOUR SPORT—SAVE THE CUBS!



DON'T LOSE YOUR NERVE

By ARCHIBALD RUTLEDGE

NEARLY every hunter—and this is true of many a veteran as well as practically all those of fewer years of campaigning in the wilds—has had the experience of being put mentally on the spot by the appearance (especially the sudden appearance) of wild game, or by a surprising maneuver executed by it.

There is something paradoxical about being so bewildered. You are hunting for something; yet when it appears, it takes you off your feet. Perhaps this is because you have formed many times an image of the moose or the deer, the grouse or the wild turkey; and the actual wild creature does not exactly conform to your image. For one of many reasons he is likely to surprise you, even to confound you. And, since there is nearly always but one moment when a real shot is afforded, if you are off balance then because of a kind of paralyzing astonishment, your chance is likely to be gone. The thing has happened to me so many times that I have long since come to believe that no sport in the world calls for more swift and accurate *thinking* than does hunting. A good gun and a fair target do not always insure success. An armament and your opportunity do not necessarily mean victory. Constant and entirely sane mental alertness is imperative. It might be supposed that a hunter, when he sees game within range, merely has to shoot it. But it isn't as simple as that. Circumstances may so complicate the situation that before doing anything, he has first to decide what to do. A buck, let us say, has dramatically presented to the hunter a problem that he has to solve before he pulls a trigger. It is

the solution of such problems that marks the great hunter, but let me hasten to add, for modesty's sake, that there have been many such teasers for which I found no answer.

To make clearer the exact idea that I have in mind, I shall recount some incidents out of my own experience that very definitely put me or some of my friends on the spot. The last shall be first. It happened on New Year's Day, 1937.

That was the last day of the deer season in South Carolina. It was four o'clock in the afternoon. The weather was warm and misty, with a gentle but insistent wind blowing from the east. It was not only the last day, but almost the last hour; and experience has made me so superstitious about last chances that I was fully prepared for something big to happen. As our final drive we decided to flank a long bay thicket in the pinelands. I was in the lead, walking about fifty yards from the edge of the swamp. One of my sons was a hundred yards behind me, and two other flankers behind him. As my son had not had a shot, I put him in what I considered the most favorable position; for the wet wind was blowing up the drive, against the drivers, and I thought it likely that a buck, if jumped, would start upwind.

We had walked not more than two hundred yards when I heard a telltale break in the bushes almost opposite me yet a little ahead. It was an ideal place for deer to lie. The thicket was a sheltered place yet rather open; and it has long been my experience

that an old stag usually prefers not to secrete himself in a place too dense. Indeed, it is sometimes amazing in what sparse cover a deer will lie down. In this long bay there were gallberries, sweet-bay bushes, little pines, sparkleberries, and highbush huckleberries. Over the tops of the smaller trees smilax and jasmine vines had made canopies.

I had but uncertainly located the sound in the branch, but as I looked, what I saw filled me with delight. I saw two full-antlered bucks starting back directly toward my son. They were still in the thicket, but they were heading out; and if they held the course they were running, they would pass within a few yards of him. I stood motionless to watch history made. This looked to be one of those rare chances at a double on bucks.

Even in the cover of the thicket I could see that there was a great difference in the size of the deer and in the size of their horns. The one in the lead was a six-pointer; but he carried just one of these little nondescript sets of horns. His partner carried the rack. They were running about fifteen feet apart, the smaller one directly in front of the Old Man himself. It may almost be set down as an axiom of deer hunting that the one worth having will come out last. Many a hunter has lost a chance for the trophy of a life-time by shooting at a smaller buck when what he would infinitely have rather had was coming only a little way behind. As soon as I saw the beautiful tall horns on the second buck, I hoped that my boy would give him especial attention.

Now, Old Timers, let me draw your notice to the fact that I had the thing all figured out as far as my part in it was concerned. The game I had to play was just not to blink an eye until the drama was over. Let me say also that even an old hunter will experience a certain sense of relief if he discovers that he is not called upon to assume the heavy responsibility of making a fancy shot—especially if he has an audience, as I did. As my son, now a lawyer, has been in the woods with me ever since he was six years old, I had a feeling of complacent assurance when I saw those two old stags heading out toward him. He could handle the situation, I felt sure.

But suddenly the whole layout changed—and this is the very sort of thing that is likely to happen in the woods, and it calls for fast thinking. The bucks cleared the thicket and got into the open woods at just about 70 yards from me. With their second jump after they were in the pine-land, they abruptly changed their course. Either seeing my son, or winding him, or both, they turned toward me. Much as I preferred to have my son shoot, I knew it would be vain for me to show myself in an attempt to turn the old stags back to him. Having once veered from him, they would not go back that way. What I had to do was to make an unexpected shot. Well, I'll tell you what I did, and you figure out whether I was a hunter or a dumb-bell. I find myself still puzzled to answer that very question.

There was just about a minute in which I had to decide an awful question: should I try for a double, or should I make sure of the grand head on the buck running behind?

Well, in the first place, I could not shoot at all until the deer passed my son. In the second place, about fifteen feet separated the deer. In the third place, I was using a shotgun, and the bucks were fifty yards from me. Had they been close there would have been no question as to whether I should try for both. But you are mighty liable to wound a deer at fifty yards instead of killing him. To make a double, you should shoot the first deer first. If you shoot the second one first, by the time you have made sure that he is really down, the first will likely be out of range.

I tell you those two bucks put me on the spot.

But at least I made a decision; I passed up the leader completely, giving all my attention to the monarch following after. He fell at the first barrel, but he was a long way from being dead. For fear he might play me a regular buck trick and get up and get clean away, I held my second barrel for a moment. By then the leading buck was far out of range.

Fast thinking I know I did. But was it good? What would you have done under similar circumstances? When the other standers came up, all of them except my son wanted to know why I had not shot at both bucks. He had had the thing figured out about as I did.

Some hunters when they see game actually go into a trance; others are seized with a kind of a frenzy—and these are the boys who are dangerous with firearms. Still others, having a very imperfect idea of what game looks like, are liable to let fly in the direction of anything that moves. They think, for example, when they are hunting deer, that the next thing that moves just *has* to be a deer. For some years I have kept a kind of record of hunting accidents that have been reported as having been caused by what we might term *wrong identity*. Thus in my scrap-book I have several cases of men shot in mistake for wild turkeys; several for groundhogs; many for deer; three for squirrels; two for grouse; and one for a rabbit. Of course, the truth is that the hunter probably did not wait to discover what the object was. He shot first and then investigated. He killed before he was certain what he was killing.

In all these cases, the presence of game, or even the imagined presence of game, has put the hunter mentally on the spot—sometimes with ludicrous, sometimes with disastrous, results.

It is almost unbelievable what some men will shoot at when they are in what we might call a killing trance. One day I posted a friend of mine on a deer stand. Having but a feeble regard for his ability to retain his poise under excitement, I stood near him (but discreetly and watchfully behind him). There were no deer in that

(Continued on Page 21)





EVERY Game Protector submits a report of his daily activities at the end of each month and, of necessity, keeps a diary of his official acts. The four or five lines (or less) devoted to each day's happenings on the monthly activity report or the cryptic remarks entered into the diary from which the report is compiled do not allow more than an intimation of what happened on any particular day. Let's go back to one day during the last deer season . . .

The entry in the Activity report for December 4, 1948 read:

"12:01 am Completed investigation, made four prosecutions. 4:00 am At Hdq. Office work. 10:00 am Accompanied Protector Kitchen, checking hunters and patrolling for violations north to Glasgow and vicinity. 11:00 pm.

. . . . And the heiroglyphics in the diary wouldn't have meant much to anyone except the writer. For aside from the figures filled in for mileage, meals, etc., the summary of the day's accomplishments read:

"1201 Comp inv 4 procec 4a Hdq Off Work 10 a Acc Kitchen PV etc Glasgow 5 procec 11 p."

That's what the diary and the activity report said happened on the fourth day of December. And, here is the Story That Goes With It . . .

At one minute after midnight a new day started but to Game Protector Glenn Kitchen and I it didn't mean much. We had been parked in front of a house in Gallitzin Township for several hours waiting for two prospective donors to the Game Fund to return to their roost for the night. Earlier in the evening we had received a complaint of a

A STORY GOES WITH IT

By N. M. RUHA

man and a woman hunting too close to occupied buildings and giving the owners some hot tongue when they were asked to move further away. More to keep a parcel of land from being posted than for anything else we promised to find the people and straighten them out.

We managed to trace the couple and locate the home at which they were staying. Here we found that there were two men and their wives and that the accents were not Cambria County, Pennsylvania. The women informed us that the men had gone to the nearby village of Loretto for a little beer drinking and were expected back soon. We secured three of the licenses, all resident, and readily determined that all was not as it should be. (One man and wife had given their address as 1105 Front St., Ebensburg. My Headquarters are in Ebensburg and I knew that we had neither a Front Street nor a 1100 block on any street.)

So we sat outside and waited. It was two a.m. when the men returned and after a little discussion they admitted being residents of West Virginia and that all four had hunted for three days. Then came the writing of Field Acknowledgments, Glenn's trip to Cresson with a check for a relative of one of the offenders to be converted into cash and the final settlement of the prosecutions. At 3:30 we stopped at an all night restaurant for breakfast and shortly after

four we were back at headquarters with \$200.00 for the Game Fund and a desire to sleep.

At eight o'clock my family decided for me that it was time to be up, so I made up a number of reports while waiting the arrival of Kitchen. At ten o'clock we were headed north for the deer country around State Game Lands No. 108 and Glasgow in Kitchen's car. We checked hunters near Slate Run and covered several miles near Refuge "B" on the game lands and then went through the same procedure near Beaver Valley.

After a lunch at Flinton a phone call home to check on any reports disclosed that an illegally killed spike buck had been reported to ex-deputy Game Protector Troxell at Mountindale. As we passed through Glasgow we noticed a car with Ohio plates turn off the highway on a dirt road and we decided to follow and check the driver, who was the only occupant, despite the fact he wasn't particularly dressed like a hunter. After a mile the car stopped at a house and the driver began to unload a supply of groceries. We stopped and without divulging our identities we engaged the man in a conversation about hunting and he volunteered the information that he had been out without any success. Then we made ourselves known, asked for his hunting license and our hunch paid off—he had a resident license on his coat which he removed, along with his rifle, from another car with Pennsylvania plates. He desired an hour or so to raise the money to pay his fine

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OUTDOOR KIDS

By HAL H. HARRISON



BILLY and Jane stood on a little rise overlooking the lake. Their binoculars, Christmas gifts of the previous year, hung from straps around their necks. Far to the south, now a mere hair-line in the horizon, a wedge of wild geese was disappearing.

The children stood there silently watching the great V vanish. Then, Billy turned to his sister and said:

"You know, Jane, this migration may be a wonderful thing as people say, but do you notice how much happier you feel about it in the spring than in the fall?"

"Gee, whiz, yes," Jane replied. "I can remember how we ran all the way home to tell Pop when we heard the geese honking last March. I don't feel like telling him that they are leaving today, do you?"

"Nope. But maybe the folks down south are just as glad to see the birds come back as we were to see them arrive last year," Billy ventured.

"Maybe, but where are those geese going, do you know Billy?"

"Down along the Atlantic coast, I guess. Most wild geese that cross Pennsylvania are headed for Chesapeake Bay and on down the coast to Florida. They sort of scatter out wherever there is food in winter," Billy told Jane.

"There's something about this migration that I don't understand . . ." Jane started to remark.

"SOMETHING? Say, there's a lot of things that a lot of people don't understand. Migration is still quite a

mystery, you know, Jane," her brother stated in a very definite voice.

"Well, anyway," Jane continued, "people say that birds go south in the fall because they are in search of food. Well last August when I told Pop that I hadn't seen a yellow warbler for a month, what do you think he told me? He said that the yellow warbler starts south as early as July. I don't think that it was so hungry in July that it had to go south to hunt food, do you?"

"No, and I don't think birds have to come north to find food or nesting places in the spring, either," Billy agreed.

"Then what is the reason?" Jane insisted.

"Who knows?" Billy answered in a not-too-helpful tone. "All I can tell you is what it said in our science book in school last year. It said that folks have some ideas about migration, but that no one is sure. One idea is that ages ago birds became so crowded in the south where they all lived that many of them kept moving north to nest. Birds today are still following those habits.

"Another idea," Bill went on, "was that the ice age drove all the birds south; that before that they lived here as well as in the south. As the ice went away, the birds began to go back and forth to their old homes. That caused the migration of birds as we know it today," he added.

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How Do YOU Rate?



by N. R. Casillo

EVERY MAN rightfully inherits from his primitive forebears the instinct to hunt. Naturally, both the intensity and the constancy of the instinct varies with the individual. In some the urge reaches its peak during the middle teens and then gradually peters out altogether. In others the instinct persists with unabated vigor as long as the individual is physically able to answer the call.

During that period in America's development when game was plentiful and every man hunted because of necessity, little or no thought was given to the "sport" entailed in getting a full bag. The hunter's idea was to garner his game as efficiently and as expeditiously as possible. And to accomplish his ends with the least expenditure of time, powder and shot, no holds were barred. If entire coveys of birds were wiped out with a single shot the prowess of the hunter was immediately recognized and acclaimed by his fellows. Accordingly, Kit Carson, Daniel Boone, Bill Cody and company were considered topnotch hunters because of the apparent ease and dispatch with which they brought home the bacon.

Just a few days ago I was conversing with an old time hunter and fisherman. Eighty-eight year old Bill Schuller can talk endlessly about the fabulous strings of "salmon" taken from the Mahoning river here in western Pennsylvania or of the prodigious bags of rabbits, grouse and pigeons (mourning doves) taken practically anywhere in Lawrence county. Set-guns, trot lines, explosives, huge bird nets and other paraphernalia were all a part of Bill's equipment. When asked about what he did with excess game and fish bagged or caught, he replied that he gave it to the neighbors or fed it to the hogs.

Some modern hunters are not to be judged too harshly even tho' their exploits may not always be carried out in the best traditions of the dyed-in-th-wool sportsman. When they persist in shooting their limits day after day they are simply giving vent to instincts which should have been shed in their late teens. Yet, if every hunter consistently insisted on a full bag every time he went afield even the most uninformed of us can picture the results.

How often have you heard a dissatisfied hunter grumble "After the first day birds

were as scarce as dinosaurs," or words to that effect? And when asked how he fared on that opening day the chances are that the answer will be "Got the limit!"

"The limit!" you may echo with a righteous lift of the eyebrows.

"Why not? If I didn't somebody else would have." So, there you have a condition than can only be remedied by education in conservation and good sportsmanship.

A couple of years ago four waterfowlers spent some hours on the eve of opening day erecting a duck blind on a strategic point in Pymatuning reservoir. Before dawn on the next day they found their blind occupied by three intruders whom they promptly ejected. That should have ended the matter, but instead the opportunists selected a spot less than three score feet from the blind where they snugly ensconced themselves behind a thin screen of reeds. When the shooting opened up, it did not require a clairvoyant person to see that the trio was trying to capitalize on the apparent experience of the quartet. To wit: when the latter succeeded in bringing in ducks by

dint of some really clever calling on the part of one of its numbers, the trio would begin shooting long before the fowl came anywhere within range of either. It's a wonder that a pitched battle didn't ensue, altho' there were some fisticuffs.

The apparent orneriness of the foregoing trio compares quite favorably with the high-handed banditry of the culprit who barges in and takes over the rightful kill of some deer hunter.

For some uncertain reason route 285 or Blair Bridge road skirting the southern environs of Pymatuning Migratory Waterfowl Refuge has been dubbed "Murderers' Row." The most plausible reason for the name is undoubtedly due to the lethal attempts made on the life of every waterfowl passing in and out of the area by the rows of gunners frequenting the road especially on the first few days of the season. That the intended victim may be at a range that would tax the effectiveness of an anti-aircraft battery and clicking off a mile a minute in the bargain makes not the slightest difference to the expectant gunners. So, at the merest provocation they unleash a barrage sounding like the opening of festivities on the late Western Front.

Now, it is our honest contention that the trigger happy attitude on the part of this doughty band is a major factor in the conservation and preservation of these self-same waterfowl. Yet, on rare occasions one is hit. When the initial shot takes effect and the bird starts falling, there is a momentary pause eloquently expressive of silent amazement and then they set to with a will and blast the unfortunate fowl for every foot of its descent. The resulting wrangles over the ownership of the sadly beleaguered quarry would be a disgraceful commentary on the sportsmanship of those embroiled excepting for the fact that that angle is completely overshadowed by the ridiculous humor of the situation.

However low the foregoing miscreants may rate in the scale of good sportsmanship and fairplay, they are certainly no worse than those who vehemently curse their luck as well as those whom they think responsible for their failure to get a limit bag every day of the several spent in the field.

Regardless of the legal or moral infractions committed by misguided hunters, their deeds are usually committed because of the overpowering desire to possess game, to show off their ability to their fellows and believe it or not, to have game on the table.

You may be old enough to recall the days when the *average* hunter went afield and returned not only with game, but also with miscellaneous "bounties of nature" such as apples, various kinds of nuts including the now practically extinct native chestnut as well as a jug or two of pungently aromatic cider. Frequently there was no game, but the heterogeneous collection of loot more than made up for the missing game.

Now, then, it is not advocated that we turn our hunting excursions into fruit gathering expeditions even if the farmer would stand for it, but the objective may be very well modified so as to include those homely things which are too rapidly being relegated to a bygone era.

"Now, hold on" interrupted a friend of mine while being kidded about his condition while on an alleged deer hunt in the mountains. "I don't like to hunt," he explained. "Sure, I was drunk," he admitted, "but I got my deer."

The point of the kidding was that he brought down a deer without so much as sticking his head out the cabin door during the entire week he was there. Parenthetically, it may be said that on the day he shot his deer he was too groggy to leave camp. Indeed, he simply rested his rifle on a chair back and shot through the window at one of the three deer standing less than three-score feet away. In fact, he didn't even bother to raise the sash. The fact that he unmercifully "rode" less fortunate companions who had tramped interminably made the feat extremely unsavory. To make things worse he repeated the feat last hunting season.

"Will we quit hunting when there is no more game to hunt?" This was the paradoxical question asked the gang at one of our recent get-togethers.

"We'll have to," replied Bill, puzzled by the utter nonsense of the question.

"But, don't you think that it's something to get out with a dog or two and put them through their paces when the snappy days of fall come around?" This from one of the more poetic members of the bunch.

Bill's face clouded in honest bewilderment. "But, what's the use if there's no game?" he insisted.

"Then, I take it that you consider that day lost when you go afield and return empty handed?"

"Why, certainly," returned Bill. "It's no fun getting skunked."

"But, increased hunting pressure, diminishing covers, exasperated farmers, better guns and ammunition, better dogs—none of these things are helping the situation."

Bill's eyes twinkled. "Do you suppose then, that we simply commune with Nature—" he asked deadpan.

Hunting and fishing are so inseparably a part of suitable habitats that to destroy the latter or upset their balance also destroys or decreases the amount of game or fish thereon. Man himself violates the very laws with which he hopes to help restore our wildlife. Animals never exploit Nature as does man. Animals want nothing more than a chance to survive. Man demands not only food and shelter, but comforts and luxuries as well. Then, after he gets those things which satisfy his creature comforts he sets out to capitalize on Nature by exploiting her. When undisturbed by man, animals never completely destroy a habitat. Man not only destroys it but also makes it untenable for anything else.

Consider our dwindling resources chiefly exemplified by ruined land areas and polluted streams. Then, consider our ever increasing population. However, despite the limitations imposed by the immediately foregoing we clamor for more game and fish. A farmer does not attempt to pasture more cattle than a field can support, yet we defy or ignore that common sense practice in our attempts to meet the demands of both hunters and anglers. We demand more because we are unaware of the real situation. Our

situation may be compared to that rapidly approaching time when the demands of our motor vehicles for more and more gasoline will greatly exceed the supply, *except* that there are no substitutes for fish and game. It may be explained that this condition has not been brought about by the lack of land for expansion, but because we prefer to open up the new lands rather than rehabilitate those ruined by too intensive or wasteful farming. We have lately begun to reclaim much of the land thought to have been irreparably damaged by former unwise methods of growing cotton. Our world could comfortably support double the present population if we would but reclaim land thought to be hopelessly impoverished. The reclamation of millions of acres in this country alone would not only preserve our wilderness areas, but also intensify our crop of common small game animals.

Raising more game, promoting good farmer-sportsman relationships, adequate and efficient law enforcement, habitat improvement and a suitable educational program are all desirable and necessary to hold a sagging line. What is more, the situation may be immediately improved by the strict observance of a simple expedient. **IF EVERY SPORTSMAN TOOK IT UPON HIMSELF TO KILL LESS THE RESULTS WOULD BE AMAZING.** One pheasant or grouse, a brace of quail or squirrels, each looms large in the eyes of a fair sportsman. Indeed, there are many who consider it a breach of fairplay to bag more than one cock pheasant. After all it's not the amount of meat represented with which they are concerned, but with the fact that a live bird in the bush will furnish sport for another day or for some other worthy sportsman. This practice of personal integrity is the noblest form of sportsmanship.





PATCH-SHOOTING FIELD-DAY

by Richard Alden Knight

The Oldtimer and I were finishing dinner at his house after a particularly dismal day of woodcock and grouse shooting. As he pushed back his chair and settled himself for a re-hash of the day's activities, he grunted and looked over at me.

"It's getting so that every one and his brother likes to shoot the same places and the same time we do. We hit every one of our pet covers today and either we were too late or it was being shot when we got there. I can't figure it."

I lit a cigarette and thought it over a bit.

"If we hunt the established big covers every year it is only a matter of time until someone else finds them and thru them, someone else learns about them and so ad infinitum. But if we hunt little covers, finding maybe one or two birds in each one, do you think that might be the trick?"

He looked at me with a broad grin on his face and said, "I known just the spot. Do you remember that road we cut off on the way to"

It was cold in the morning and I slipped my toes out of my shooting pacs and curled them about the car heater. The Oldtimer was quiet as he drove and the motion of the car put me to sleep. The jar of wheels against dirt woke me and I looked sleepily out the window. The Oldtimer had pulled off the road onto the shoulder and he pointed

to a small piece of popplewhips fringing a woodlot.

"That what you're looking for," he asked.

Getting our gear together, we let the big setter out of the trunk and moved into the whips. The tinkling of the sheepbell on the dog's collar was clear in the cold morning air as he quartered through the cover ahead of us. As he reached the edge of the woodlot he began working more carefully, ranging the edge until he neared a pile of slashing about half way up thru the cover. There he froze with his head and tail high, looking expectant.

"That's no woodcock," said the Oldtimer as we moved into position. "Spot always looks surprised when he hits a grouse." I walked in ahead of the dog and two grouse exploded from under the slashing. One rocketed straight at the Oldtimer while the other swung to my right, hedgehopping the brush. I swung with the bird and shot to his left as he ducked a tree, folding him dead with the second barrel as he towered through the branches of another. The Oldtimer was having his troubles. He ducked as the bird went by him and then hooked his barrel in a vine as he tried to recover. By the time he freed himself, the grouse was about thirty yards from him, but it crumpled on shot and tumbled into the whips.

I ran to retrieve my bird while the Oldtimer sent the dog after him. As I picked up mine, I heard Spot's bell stop again and looking back, I could see him solid on point about where the dead grouse lay in the whips. We both ran towards him and as I walked in, I nudged him with my knee and told him to fetch. The woodcock he was on twisted out from under his nose like a brown cannonball, catching us both flat-footed. I slammed the bird as he hit the tree tops and lifted him a good three feet higher.

"Trying to save yourself the trouble of cleaning him?", kidded the Oldtimer. "Good thing you didn't have him centered—he's still edible."

Spot retrieved the dead grouse and gave it to me. I handed it to the Oldtimer and he tucked it away. The setter worked the remaining bit of the cover and, calling him into heel, we headed for the car.

The next piece of cover was about two hundred yards down the road. It lay along a stream bottom and looked good from the car. The dog romped across the field and slid into a point as he hit the bottom. The woodcock twittered out ahead of him and the Oldtimer mowed him down as he got beyond destruction range.

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A Turkey Hunt in Huntingdon County

by W. Cecil Davis

THIS afternoon I was reading the PENNSYLVANIA GAME NEWS and in looking over the staff of officers noticed that Art Logue, a Field Division Supervisor and personal friend, is located at Huntingdon. This association of persons and places reminded me of an experience I had as a high school boy back in 1914 that will always stand out as one of the highlights of my hunting experience. It all happened down in Huntingdon County along Racetown Branch just a few miles from the village of Grafton.

My high school principal was a man who knew boys as well as books. He was a student of firearms and of the out-of-doors. He enjoyed hunting and fishing. He also knew my interest in these same things. One day to my surprise and delight he invited me to go as his guest on a hunting trip for wild turkeys and perhaps also do some squirrel shooting over in Huntingdon County. Huntingdon County was more than a hundred miles away, and most of the roads were unimproved. It was also the day of the Model T.

Such an extended trip at that time might best be described as an expedition. The distance from central Clearfield County to Grafton was negotiated without major incident except that, after we were ten miles from home, it was all most interesting to me because I had never been farther away from home than to the neighboring town. From Grafton to the farm on Racetown Branch, which was to be our boarding place, the stones in the road were so high that one of the party had to walk ahead of the car and call directions to the driver so he would avoid getting hung up on one of the many boulders that filled the road. I remember that just before reaching the farm it was getting so dark that we had to fill the gas generator on the running board, see that the connecting hoses were tight and light the headlamps. Soon we were greeted by the glow of oil lamps through the windows of a big, comfortable stone farmhouse. Silhouetted against the sky was a belfry on top of the farmhouse housing a big dinner bell. Mr. and Mrs. Gee and their two sons were expecting us and were out to greet us even before we had gotten out of the car.

As we entered the house I noticed the broad white pine planks that covered the kitchen floor. They were neatly scrubbed but showed years of wear. A well laden dinner table set in the middle of the room. At one end of the kitchen which was raised a few

inches above the level of the rest of the floor stood three barrels and hanging from the ceiling back of the barrels were several large paper bags tied neatly at the top. Both of these items played a part in our hunting trip but I shall mention that later.

Mr. and Mrs. Gee were most hospitable people. They saw to it that we were very well fed and after exchanging the usual pleasantries about our trip, mutual friends, etc. we all sat down to visit and lay plans for shooting some turkeys the next day. This was one of the most pleasant evenings that I have ever spent. Mr. Gee was a good story teller. He had an excellent memory and he loved to hunt and fish. I think too that we all were interested listeners because we realized that we were soon to experience something in the way of hunting that was completely new to us.

There was a sizeable pile of firewood beside the big stove as the evening began. The crackle of the fire, the pleasant aroma of burning wood and the subdued glow of the oil lamps all contributed to creating an atmosphere that was ideal for story telling.

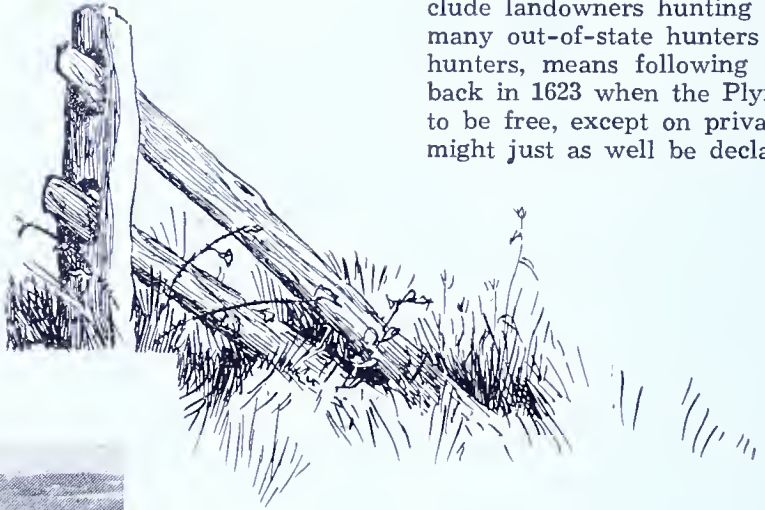
First Mr. Gee told us about the country round about and where we would be most likely to see some turkeys. Then he gave us a lesson in turkey-calling. He took the bone stem from his corn-cob pipe and proceeded to make that kitchen sound like a turkey pen. Incidentally he mentioned that it was not a recommended practice because it was illegal. However, he did remark that although turkey calling was but one of the incidental uses of a corn-cob pipe he had some extras and we might enjoy taking them with us when we went to the woods. It is quite remarkable the measure of proficiency that we all achieved that night in turkey calling; as a matter of fact I think that today, thirty-five years later, I could give an acceptable demonstration of this questionable art.

As the night grew on and Mr. Gee continued to hold the undivided attention of his guests, he suggested that after our long drive we perhaps needed a drink of cider. It was then that I discovered the meaning of the three barrels at the end of the kitchen. Each barrel contained cider of a varying degree of hardness. Since I was but fifteen years old I was not given any choice. I drank from the barrel that contained the fresh cider.

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THE GATE OPENS—Asking permission is first rule of sportsmanship that brings understanding between hunter and landowner. Offers to share game or a few shells often results in a "come back anytime."



ALL OUT—Ready to hop off the car deck are a springer spaniel and a pair of pointers eager for that first scent of birds.



CAMPAIGN STRATEGY by a couple of Pennsylvania hunters scanning the rolling countryside for the right spot to turn the dogs loose.



COME BACK ALIVE! One hunter climbs fence, partner hands guns across; then climbs over himself.



THERE HE GOES . . . and that old ringnecked rascal is really pouring on the coal, so better make it good. But **HOLD IT . . .** there's another rooster lurking in the grass to the right.

STORY

HENRY BLATNER

half a million Pennsylvania nimrods
with thousands of shells, dogs and
Pheasant. This number doesn't in-
who do not require licenses, nor the
locked lands. Opening Day, to most
ions of Americans that began 'way
first game law declaring all hunting
st of each year, for Pennsylvanians,



RETRIEVE . . . Pointers range, find and point the bird, springer spaniel brings dead or crippled bird to hunter's hand. Using good dogs helps conserve game.



POINT! It's the most thrilling moment afield, and the classy pointers have that old Chinaman pinned down tight. They'll hold that motionless pose until after hunter flushes bird, takes his shot, and orders them on.



IN THE BAG . . . Optimistic hunters have big game pockets and it's always mighty swell to feel that weight thumping your back.

LUNCH TIME . . . for both dogs and hunters always brings out the hits, misses and alibis.





A deer paid a visit to one of the steel plants in Johnstown on June 24th. It entered the Lorain Steel Plant and ran the width of nine bays; then crashed through a window. Next it tried to escape but was cornered and caught against a fence. The plant guards tied it and hauled it into the country and released the "city-seeking" buck.—Game Protector Louis Mostoller, District G-14, Johnstown.

While trying to live-trap some beavers whose dam had flooded a pasture in Cusawago Township, I saw the smallest beaver I have ever seen. We tore a big hole in the dam, let it drain a few hours, and then went back determined to catch the broadtails and move them out. The entrance to the beaver house was out of the water so I went over to investigate. After looking the house over, I sat down to watch the entrance in an effort to decide what the best method would be to catch the animals. While sitting there, I glanced down at the entrance and was much surprised to see a baby beaver about ten inches long swim out of the hole, paddle around a minute, and then calmly swim back into the house. This one was about the same size as another little fellow which tried to swim past the house a few minutes later. He could only swim about five feet at a time and then would partially crawl up on a lily pad rest. You can imagine how small they were when they could rest on a lily pad. After watching this free performance, I decided that here was a female beaver with her litter of young. Rather than take a chance of endangering the lives of the little ones, I decided to try to persuade the farmer to postpone the trapping for a month or six weeks. And after hearing my story, he readily agreed.—Game Protector Clair W. Dinger, Albion.



Carl Zekoski, one of our Food & Cover Corps members, was carrying a roll of Number 9 wire while assisting in re-wiring the refuge on State Game Lands 40 one day in July. Suddenly he heard a buzzing around his feet. Upon looking down he discovered a big rattlesnake. He somewhat hastily dropped the wire and retreated to safer ground to search for a weapon with which to dispose of the snake. A rock in the right place rapidly quieted the buzzing and upon measuring the snake, it was found to be 42 inches in length. It was a beautiful specimen, having just shed its skin, and was nearly as large as a man's arm in girth. We also killed a large copperhead on the same job.—Game Protector Vic Shaffer, District B-17, Thornhurst.

During July Mr. William Tucker of Stroudsburg reported an interesting sight to me. While hunting woodchucks near Stroudsburg, he saw a mother skunk and five young. When the mother skunk noticed Mr. Tucker, she made a noise and all the young came to her, crawling underneath their mother. Mr. Tucker said that after that, all you could see was the mother skunk with no trace of the five young.—Game Protector John Doebling, District B-18, Stroudsburg.

A man and his wife, while fishing out of a boat at Red Bank during July, noticed a bear enter the water coming from the direction of State Game Lands 115, located on Montour Ridge. The bear seemed to be swimming directly towards the boat so the couple decided to pull anchor and start for the opposite shore. Mr. Bruin was left quite a distance behind the couple in the boat and was seen to land on a small island a few miles below Riverside. It didn't take the bear long to swim the river, but the couple in the boat lost no time either and beat the bear to the opposite shore by several minutes.—Game Protector Bruce Yeager, District C-15, Northumberland.

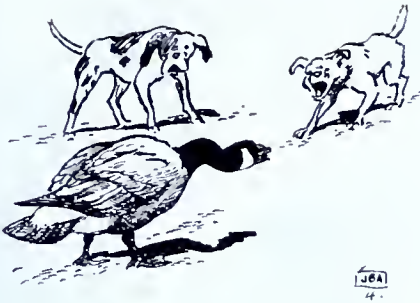
On the afternoon of September 4 I was walking with my son, Charles, up a log road near the North Branch of Laurel Run, about one-half mile above where the north and south branches join. We were suddenly attracted to a fluttering in the brush about three or four yards off the trail and discovered a large hawk which we thought had been wounded by some predator hunter. On

closer examination, however, we discovered that the hawk was in apparent distress and had his mouth open. Something black was entwined around his neck. Closer observation disclosed that a large blacksnake was wound around the hawk's neck four or five times and about two feet of the forward end of the snake was in what apparently was a ground squirrel's hole. He certainly had that hawk anchored down. We killed both the snake and the hawk. The blacksnake measured 5 feet and 2 inches and in the center wasn't much thicker than a half-dollar. The hawk had a wingspread of 5 feet and 4 inches. Our deduction was that this hawk intended to kill the snake and eat him, but the snake got the better of the hawk.—W. W. Dodson, Harrisburg.

For an unusual picture I took movies in June of an unfortunate groundhog that had a tin can stripped over his head. Game Protector Turner wanted to help the poor creature and decided to remove the can, then release it in the bank of a nearby stream. Upon being freed, the groundhog attacked Turner and bit his shoe. After a bit the groundhog showed up in deep water, twenty feet from shore. I was able to record this remarkable shot and was surprised to note that the groundhog could swim with the style and grace of a beaver.—Conservation Education Assistant, Roy Trexler, Division "A," Reading.

Fire swept nearly 2000 acres of timberland in Rostraver Township, Westmoreland County in early May, destroying much wild game and 4,000 recently planted pine trees on the property of the Monessen Sportsmen's Association. The trees were planted about four years ago as a project sponsored by the club and the Pennsylvania State Department of Forests and Waters. Firemen from Monessen, Belle Vernon and North Belle Vernon battled the fire for more than three and a half hours with every available facility at hand. Six residences and the Monessen Sportsmen's newly erected buildings were threatened but no damage was caused to them. However, many birds and rabbits were destroyed by the flames on the property used by the club members during the hunting season. It was believed that timber and fence loss will run into thousands of dollars.





One evening early in April our two small dogs kept barking just outside the back door. My nine year old grandson went to the door and put the light on in front of the garage. He then immediately called for his thirteen year old brother to come. By that time, I went out to have a look. We could all see very plainly what the dogs were barking at. They kept asking what it was so I told them to try to catch it, thinking that it was crippled. They started to walk toward it and when they got within about twenty feet of it, a good sized Canada goose said "honk-honk" and took off into the night. The same night I heard a flock over-head so I suppose this bird got hurt or strayed from the flock.—Farm-Game Cooperator Leo B. Chase, Girard.

During April, Ted Sands, an employee of Kinter Milling Company, Mehoopany, heard a noise in the chimney where the stovepipe from the office goes into it. Removing the pipe he found nothing. Two days later the noise could again be heard. When the pipe was removed a female wood duck was taken out. All that kept the duck from getting into the stove was a damper in the pipe. The chimney is from 30 to 35 feet high. The duck evidently was hunting a nesting site when it entered the chimney.

Another such incident was reported by a resident near Lake Carey who discovered a duck in his home that had come down the chimney and out the fireplace.—District Game Protector Philip S. Sloan, Mehoopany.

One day in late March while I was releasing ringneck pheasants on Farm-Game Project 72 something out of the ordinary happened. I released some birds close to a plot of standing corn which the Commission had purchased last fall. One of the cock birds flew for this choice cover and I saw him land right in the corn. Glancing in that direction a moment later, I was surprised to see two cock birds fighting. I watched and very soon the bird that had just been released came running out of the corn field across a buckwheat field with another cock bird in close pursuit. They tangled again in the open field but the newly released bird soon broke ground and ran away. In the short space of two minutes that particular bird had won its freedom and has been in two fights with a determined opponent who did not want any competition in his "crowing area."—Game Protector Clair W. Dinger, Albion.

If the "modern" sportsman would use his head in more ways than one when he becomes "lost," then some of the old timers would be able to rest comfortably. One such case occurred this past deer season when it was reported that a hunter was lost. The State Police detail and several small groups of hunters searched through the night and the following day I was called in along with a number of sportsmen and hunters, all natives of the area. Before beginning the search it was suggested that one of the group call Pittsburgh and notify the folks at home as to what had happened. The call was placed and who should answer the phone but the fellow that was supposed to have been lost. When he came out of the woods at dark, he couldn't find his buddies and didn't know where the farm house was that was supposed to be their meeting point. Therefore, he simply hitch-hiked a ride to Altoona and took a bus or train back to Pittsburgh. Needless to say that is one way of remaining unpopular among hunters.—Game Protector Owen E. Seelye, Altoona.

Watch for These Bands!

Eleven of the thirteen clubs in my district cooperated in the day-old pheasant chick program this year. Other clubs helped financially although they did not raise the birds. Last spring we applied for and received 1375 chicks for these clubs and 4 Farm-Game Cooperators.

In September we stocked 558 cock birds and are holding 534 hens for release next Spring. Even the hens raised by the Farm-Game Cooperators are being held and paid for by the clubs in this district.

In order to have the sportsmen report more of the birds killed this fall, we have inaugurated a banding system which is unique and might well be used by more clubs throughout the State. The clubs paid for the bands which are made of a plastic material and come in various colors. Each of the cooperating clubs was assigned a color as follows: Duncansville Wildlife Association—Yellow, Polecat Sportsmen's Association—Orange, Shawnee Conservation Club—White, Halter Creek Coon Hunter's Association—Black, Henrietta Sportsmen's Association—Pink, Martinsburg Sportsmen's Association—Blue, Ormenia Sportsmen's Assoc.—Purple, Clappertown Sportsmen's Assoc.—Green, Ganister Sportsmen's Assoc.—Red, and Newry Sportsmen's Assoc.—Yellow.

These clubs are asking their members and the public at large to report any banded birds killed to either myself or to any of the cooperating club officers.—Game Protector R. F. Turley, District D-6, Roaring Spring.



On July 21 I received a call to come to Lakeside where a deer had killed itself. At the Lakeside Amusement Park, there is a wire fence around the roller coaster to keep people from venturing too close. This deer, a buck with three points in velvet, had evidently caught its head in this wire and had broken its neck struggling to get free.—Game Protector Harry Defina, District B-15, Tamaqua.

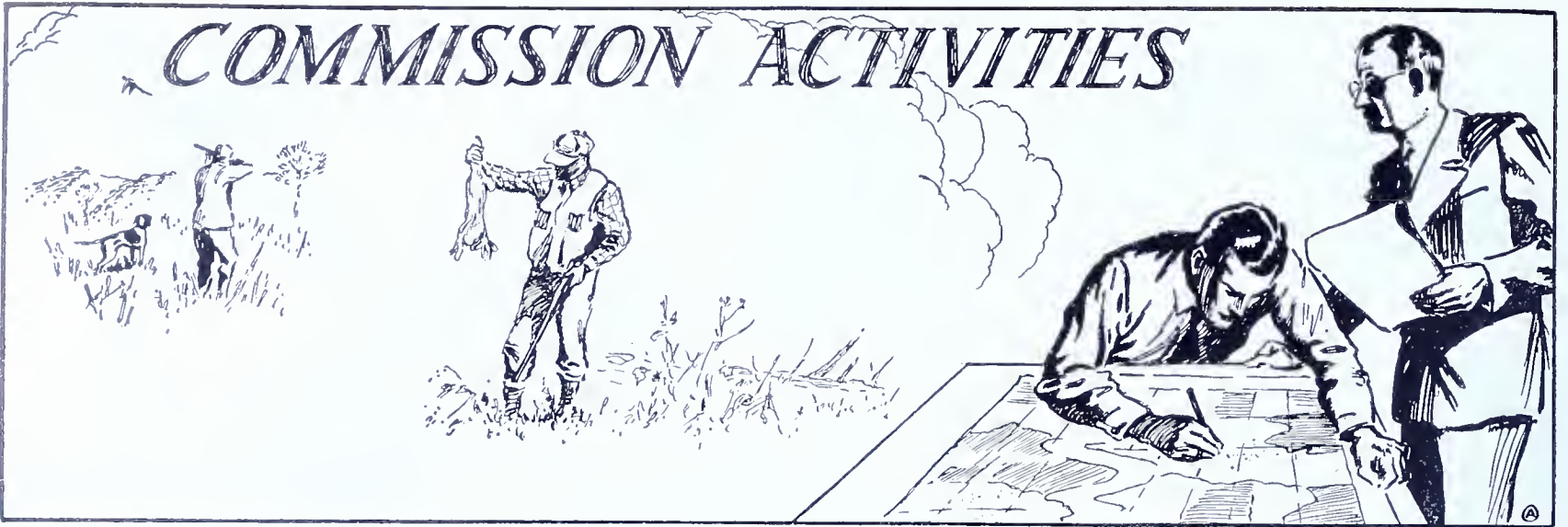
On my way home via Hickory Run State Park one day in July I met a lady berry picker coming out of the woods carrying a young fawn. When I asked her what she was going to do with it, she said, "The poor thing was lost so I'm going to take it home for a pet for my little boy. I wish I could find another one for my little girl." Needless to say, the fawn was put back where she found it and I don't think she will pick up another one.—Game Protector Bill Achey, District B-16, Weatherly.

While on patrol in July with Deputy Smith and Fish Warden Max Nohl, we saw a large water snake. After many shots the snake swam downstream mortally wounded. We returned to the same spot about 30 minutes later and found the snake on the bank just about dead. An object could be seen protruding from a bullet hole and, after examining it, we found it to be a toad which the snake had recently swallowed. We cut the snake open and the toad was in pretty poor shape. But after several minutes he hopped away and seemed none the worse from his experience.—Game Protector John Putnam, District B-5, New Milford.

Deer are again on the increase in our section. It seems that the bucks were the greatest casualties during the month of June. Two were hit on the highways and one was killed by a train. The latter was hit in the Borough of Wyomissing, not more than a half mile from the Division office. A doe created considerable excitement in the city of Reading until it was crippled, later to be destroyed by a humane officer. A male fawn was hit by a grass mower and its two front legs were cut off at the knee joint on June 28. George Weller and I saw a doe with twin fawns on the Daniel Boone Homestead in the middle of the afternoon one day while on patrol.

The wren which had taken up quarters in the clothes-pin bag on the back porch of the residence of Deputy Bender hatched out six youngsters. They left the nest on June 25th.—Game Protector Joe Leindecker, District A-7, Reading.

COMMISSION ACTIVITIES



Isaac C. Baumgardner

Latest addition to the Commission's "Quarter Century Club" is "Ike" Baumgardner, Superintendent of the Western Game Farm. He completed twenty-five years of service on August 1, 1949 and has held positions of refuge keeper, superintendent of the old Fisher Game Farm, Sr. Construction Inspector, Game Protector, and Game Farmer.

Pennsylvania Starts Intensive Study of Predators

A Federal Aid in Wildlife Restoration (Pittman-Robertson) study of the ecology and economics of predators in the northeastern United States was announced recently by the Pennsylvania Game Commission. The project, started last June, will be a preliminary step toward extensive, comprehensive studies of the effects of predators on game populations in Pennsylvania.

Under the supervision of Roger M. Latham, the study will attempt to determine food preferences of predatory species by stomach, fecal, and pellet analysis and by reliable observations at den and nest sites. It will interpret predator control measures and their effectiveness in reducing predator populations and increasing game and other species. The economic effects of predatory species on fur markets will also be included in the study.

Ohio Again Makes Bobwhite A Game Bird

Ohio's State Legislature recently overrode a gubernatorial veto to reinstate the bobwhite on the roster of Buckeye game birds from which it has been absent for the past 36 years, the Wildlife Management Institute reports.

Although the quail has been officially lifted from the songbird list by the passage of the bill, Ohio hunters will not have an opportunity to throw lead at the feathered buzz bombs for the next ten years. The bill provides for a ten-year rehabilitation program by the Conservation Commission before the declaration of an open season.



Ernest E. Hunsinger

Twenty-six years of loyal and faithful service to the sportsmen of Pennsylvania is the record carried into retirement from active duty by Game Protector Ernest Hunsinger. Ernie retired voluntarily on August 1st after serving as a game refuge keeper and Game Protector in the Potter County area since 1923.

Beagles in Pennsylvania

By L. J. GORSKE

The beagle now rates second in popularity in the United States and is surpassed only by the cocker spaniel. In Pennsylvania there are more beagle clubs organized than in any other state in the union. In 1947 there were a total of 135 licensed beagle field trials with 24,035 starters, and since that time the popularity of beagle trials has increased by leaps and bounds. The most popular class so far has been the 13 inch bitch class.

The beagle in every sense of the word is the working man's gun and field trial dog. The cost of feeding and care are very low and entry fees for trials are also kept to a minimum. Due to the dog's tremendous popularity, training areas have been established in almost every county in the state. These areas are protected and well-stocked with rabbits each year. The territory surrounding these areas benefit greatly due to the fact that the training grounds serve as breeding areas for the cottontail rabbit. Eventually, some of the rabbits move out to these surrounding territories which are open to hunting.

New York Bans Inexperienced New Hunters

A new law just passed by the New York State Legislature prohibits the sale of hunting licenses to minors under 17 years of age until they have been schooled in the handling of firearms by a state game protector, the Wildlife Management Institute reports. Under the law, only game protectors can issue licenses to such minors.

Aimed at reducing the hunting accident toll, it has the added advantages of getting the youth acquainted with his local conservation officer, teaching him respect for the law, and instilling him with an understanding of sportsmanship. Each licensed minor will be furnished with a "New Hunter's Manual" which outlines firearms safety rules and hunting ethics.

The shad is the most valuable fish of the Atlantic Coast and next to the Pacific Salmon, the most important species inhabiting the waters of North America.

The African black porcupine attacks his enemies by running at them backwards.

Hunt for Chestnut Under Way

An all-out search for possible survivors of the disastrous blight that swept through the East's chestnut stands is under way, headed by Dr. Arthur H. Graves of Connecticut, the Wildlife Management Institute reports.

Once one of the most important timber trees and sources of wildlife food, the stately chestnut was reduced within a decade and a half to a puny, sterile, disease-ridden shrub. Sprouts of up to one inch in diameter still are common, surviving on the roots of their dead ancestors. As soon as this size is reached, or before, blisters begin to appear on the bark and the sprouts soon die back. As long as this process continues, however, the chestnut lives, and while life persists there is hope that a blight-resistant tree will be found.

Anyone finding an American chestnut over four inches in diameter at chest height is urged to send a leafy twig for identification to Thomas J. Page, agricultural director, Radio Station WNBC, Radio City, New York. The horse chestnut, beech, and chinquapin sometimes are confused with the American chestnut, and cooperators should be reasonably sure of their identification before submitting samples.

DON'T LOSE YOUR NERVE—from Page 9

drive; but after awhile old Gabe Myers, one of my drivers, mounted high on a white horse, rode whistling and whooping through the stretch of low bushes. What was my amazement and alarm to see my stander drop to his knee, put up his gun, and level the sight on Gabe's dusky bosom! He was just waiting for him to get into easy range when I intervened.

This story is not exaggerated; and doubtless you have seen supposed hunters do this very kind of thing.

On another occasion this same friend and I were hunting quail in a cotton field. I had him 150 yards straight in front of me. I walked into a covey of about eighteen quail that he must have passed very close. The birds headed for him, and I shouted to him to look out. With his gun gripped rigidly and pointed upward, he spun around wildly as if doing a dervish dance. He never saw the quail. But nearly a quarter of a mile overhead, placid in the blue zenith, an old turkey buzzard was wheeling lazily. This bird, which is not yet classified as game, my

sportsman shot at violently, with both barrels, and seemed greatly provoked with his gun because it had not brought down the bird at 400 yards with No. 8 shot!

One day, in posting an amateur at a deer crossing, I cautioned him to be on the lookout for a wild turkey, as I knew that a flock ranged in that drive.

"But," he asked me hesitatingly, "what does a wild turkey look like?"

Before answering him, I scanned the stretch of woods in front of his stand. It was open pineland country, with a knee-high growth of broomsage, gallberries, and huckleberries.

"Well," I told him, "if he comes running, you are likely to see a black, snakelike head and neck above those low bushes yonder."

A half-hour later I was glad to hear his gun blare fourth; but not so glad to hear, following that blast, the pitiful yowling of one of my favorite hounds. That called for immediate investigation. The upshot of it was that I discovered that my hound had, with great indiscretion, come out to this babe in the woods; and he, seeing his black tail above the bushes, had had visions of wild turkey, and had shot holes in the dog's tail. The stander was very apologetic; but apologies for hunting accidents don't help. The dog was very critically injured in his feelings, and he went through the rest of life with his tail at a crazy angle. That experience makes me think that it is unwise, perhaps dangerous, to try to describe to a tyro the appearance of wild game. He may shoot anything, and then blame your description for his mistake.

It appears that a real hunter must go to school with his game. He has to study it: first, its appearance, under various circumstances and in various kinds of cover. That is really the kindergarten course. Then he should advance into the study of the habits of wild game creatures: the way in which they pass a typical day and night; their food; their favorite haunts; and some of the wily stratagems that they employ to escape their enemies, including man. So familiar with his game should he become that he no longer is overcome by amazement when it appears; for if he is stunned by its presence, however unexpected, he cannot hope to think fast and accurately—a primary requisite to his success. It is a safe guard also of the lives of his fellow hunters.

I sometimes think hunting would be perfectly safe if only hunters engaged in the sport; but there are so many amateurs that this ancient recreation is at times hazardous. But whether the sportsman be young or old at the game, he should, especially in these days, practise a mental alertness and a reasonableness of judgment that will, let us say, enable him at least to discriminate between a deer and a man. The Bible says, "Their old men shall see visions, and their young men shall dream dreams." That is a perfect description of what happens if men are put on the spot mentally by the game they are after.



*The
Standard
Automatic
Rifle*

MAKE IT LEGAL

The Standard Automatic rifle shown here can be fired as a semi-automatic or it can be adjusted to fire as any hand operated piece. It has provided many an argument among sportsmen and has been the cause of legal action against persons who hunted with it in the Keystone State.

Quoting an opinion of the Court: "The automatic gun . . . is described as one that is fired from the shoulder, and the recoil developed by the exploded cartridge ejects the shell, cocks the hammer, and feeds in a fresh cartridge from a magazine into a chamber of the gun, so that all that is required to discharge it is to pull the trigger. The automatic gun is not a proper weapon for the killing of game within this Commonwealth." The Game Law provides that even when such a weapon is adjusted so that it must be operated manually, it is subject to seizure and its hunter-possessor to a fine.

The Standard Automatic can be permanently revised so that it always requires hand operation. When these mechanical changes are made it becomes acceptable legally for field use in this State.

Anyone who owns such a firearm and is interested in having it changed to meet the requirements of Pennsylvania law may obtain information on conversion requirements and where the changes can be made from the Pennsylvania Game Commission, Harrisburg, Pa.



GUN DOG ACTION

By HERBERT KENDRICK

AUTUMN'S Indian summer sun adds the final touches to a landscape that was such a luscious green only a short time ago, and every hillside, meadow and field blazes with a riot of color that signals the long anticipated opening of the hunting seasons. The bamboo rods are carefully stored away and in their place, the faithful scatterguns appear to be given a final checkup for exciting days ahead and the gun dog once again will have his day. All through the long hot summer, he has no doubt been slightly neglected; however, he has lived patiently through because experience has taught him that when the corn is shocked and the frosts appear, his master will give him special attention, more exercise, and he hears hunting talk fill the air.

Make an effort to hunt woodcock this season, for mountaineers tell me they have seen many native birds, while our northern friends report satisfactory numbers that may find our land as they migrate to the southland. This game little bird affords some mighty fine sport for both the gunner and the gun dog. The woodcock is not the easiest of game to bag and presents many difficulties for the dogs who seek them. Spend some time this season with the Timberdoodle and add memories to your growing collection.

Closely following the opening of the woodcock season, we get another chance at grouse, pheasants, quail and rabbits. No matter how well you have prepared yourself for a season of hunting, you cannot derive the proper amount of enjoyment unless you have a dog or made arrangements to hunt with a companion who owns one.

During my last fishing trip to Canada I talked a great deal about dogs because almost everywhere we went families of young grouse were walking about. I was amazed at the lack of interest the natives had in bird dogs and it disturbed me greatly. Apparently, the reason for their lack of interest is based on the fact that game is so abundant there, the limit may be taken with ease without the aid of a dog. Then they see no need of raising, training and caring for one. Another reason may be that most hunters up there prefer big game and spend their autumn days hunting deer and bear instead of grouse and woodcock. If I lived in any territory where game birds thrive, I would rather go into the woods and fields without my gun than go without my dog, regardless of the size or quantity of game. My love for a dog and the wonderful association with dogs in the fields would make it necessary for me to hunt with a dog, even if I were cold blooded and careless enough to disregard cripples. Perhaps I can understand, somewhat, why our Candian friends possess so few dogs, but I cannot for the life of me, understand why we have such a multitude of gunners here that go into the coverts year after year without the help and pleasure of the finest part of hunting.

Aiding the conservation of game is one of the great reasons

(Continued on Page 32)

LEAD 'EM OR WEEP

By ED SHEARER

NOW THAT the shots of another season are ringing out, there is one remark that will be repeated again and again. "How did I miss that bird; I was right on him?" The most succinct answer I ever heard "Old Ben" tell a young gaffer, on a cold gray morning on Lake Erie, "Ter hit em yer gotta shoot where they ain't." Just where that "Ain't" was, Old Ben didn't say. No Sir, Old Ben stayed right on sure ground. He did not believe in elaborating. Years later, after shooting some thousands of shells at all kind of game, I found Old Bens "Ain't" is like married life: everybody has to find out for himself.

But to the beginner and the average hunter, there are several factors that can be of help in finding out where to aim to hit the game. There are three methods of shooting that are generally used. The snap, the delayed snap and the swing, slow or fast. It would take a book to go into the whyfords of them all. However we will take a brief look at each and the conditions under which most are used. At least it will help get started.

The most widely talked about and the least effective, is the snap shot. In making the snap shot the gun butt hits the shoulder, the cheek contacts the comb and the muzzle of the gun is pointed directly where we propose to hit. No shift of the gun is made, after it comes up. The arms and the hands entirely control the movements. The charge may go so high or low or to one side or another, but no shift is made after the gun is up. A lot of things can happen. The butt may not hit the exact spot on the shoulder. The cheek may not come down on the comb of the stock and maybe not on the right place. The butt hits the bunch of tensed muscles and may bounce while you are pulling the trigger, throwing the charge several inches from where you think it went. It's at its best with a wide open choke, in thick cover, where you just get a glimpse of your target.

The style most used in upland shooting is the delayed snap. This is very fast and is often mistaken for the true snap. The gun is thrown to the shoulder and then a pause, as the shooter notes just where the gun is pointing, in relation to the target. Then it may be anything from a slight shift to a fast body swing to close the gap. This is a combination of arm and body movement, which is very fast and accurate. It is by far the best in cover as it gives the game less time to dodge. It also gives time for correction of aim which the true snap does not. It also gives you a chance to estimate your lead.

One thing that is required above all else, to excel in the foregoing methods of shooting, is a perfect gun fit. Speed is the main requirement. There is not time to seat the stock accurately on the shoulder or to place the cheek the same place on the comb by any conscious effort. The answer is you must have a perfect fitting gun that does these things for you, most of the time. I have seen the delayed snap used on ducks over decoys successfully. However the man brought up on ducks is more likely to use some form of swing, but in jump shooting and on

(Continued on Page 30)



Lackawanna Federation

Persons 12 years of age are now eligible for membership in the Lackawanna County Federation of Sportsmen's Clubs. A motion dropping the eligible age from 16 years was passed during an early summer meeting of the group in Scranton.

Western Clinton Sportsmen's Association

The Western Clinton Sportsmen's association's most recent activity was the preparation and seeding of three game food plots. One of these is in the Keating area, the second in the Kettle Creek area and the third in the Youngwoman's Creek region. A committee in each area was given the authority to plan the game food plot and was allocated up to \$100 to prepare and seed the land.

Four New Sound Films Available

Clubs arranging their motion picture schedule for fall meetings may do well to write immediately for the circular describing the four 16 mm sound prints in color produced by the Western Winchester people. The films, "Silvertip, She Say Socko", "Pheasants Galore", "Whistling Wings", and "Realm of the Wild" are obtainable free through Castle Films, 445 Park Ave., New York City 22, N. Y.—From the Federation News.

Federation Reaches All-Time Record Membership

Shattering another record, the 1948 membership of the State Federation of Sportsmen's Clubs has been reported as 196,317, showing an increase of 21,784 of the 1947 figure. Two additional counties have been organized leaving only five without Federation guidance—Columbia, Snyder, Adams, Dauphin and Mifflin. Leading the division membership is the eight county group in the southeast with 50,303. Allegheny led the county membership list followed by Berks, Lehigh, Lycoming, Northampton, Cambria, Clinton, Montgomery, Fayette, and Mercer.

Pike Township Sportsmen's Association

The Pike Township Sportsmen's Association released 104 cock pheasants for breeding purposes in Pike, Earl and parts of Oley Townships early in March. The birds were received from the Game Commission in 1948 as day-old chicks and thereafter were in the capable care of Stanley Leh, Game Committee chairman. The balance of the surviving 300 birds were released prior to the 1948 small game season. All the cocks were banded, each band having the word "Pike" and a number on them. Any person bagging one of these birds, or finding one dead, is requested to mail a penny post card telling where the bird was found and how it met its death to Henry H. Heffner, Publicity Chairman, R. D. 1, Oley, Pa.

Even though not yet officially three year's old, the Association has grown to be second largest in the Berks County Federation with a present membership of 1760. Officers for the 1948-1949 term are: Abraham B. Yoder, President; George Haas, Vice President; O. P. Beckley, Recording Secretary; Russel B. Moyer, Financial Secretary; John B. Rohrbach, Treasurer; and Robert Harbster, Howard Schaeffer and Melvin Haas, Trustees.

Massachusetts Club Finds the Answer

At an annual expense of \$50 a year, the Fall River Sportsmen's Club of Fall River, Massachusetts, has restored good upland game shooting to club-owned lands, the Wildlife Management Institute reports.

Starting in 1935, the club began an intensive restocking program in an attempt to find ways of checking the steady shrinkage of the local game supply. Released birds for the most part, disappeared before the opening day of the hunting season and those harvested gave a small return on the dollars invested. Forward-thinking members began to delve into the reports of wildlife research and management technicians, who advised habitat control and improvement. Like most of the lands in the region, the club property had a superabundance of cover and a decided lack of winter food for upland game.

To combat this condition, the Fall River men purchased a second-hand tractor and bog harrow, cleared brush, and planted food patches in a pattern prescribed by wildlife technicians. Buckwheat, millet, sorghum, and sunflower attracted and held large numbers of game birds during the first winter. Corn and bicolor lespedeza later were added to the list. Duck potato and wild rice were established in a small marsh, and waterfowl were attracted to the area in numbers for the first time in many years. Club Treasurer Warren R. Gilbert reports that the original investment in equipment was met with income from several field trials and that the annual expenditure from the club treasury has been no more than \$50.

This project by one club presents an excellent example of applied wildlife management and research, which can be emulated to good advantage by any other sportsmen's group in America. Clubs which cannot afford the purchase of land can usually work out agreements with local landowners for scientifically sound wildlife management almost always is sound agricultural planning. Such a cooperative agreement usually results in improved sportsman-farmer relationships and increased interest of the farmer toward the wildlife on his property.



One of the five leading junior sportsmen's clubs of Butler County is the Butler City Hunting & Fishing Junior Sportsmen's Club shown here. Standing at the left in the photo in the plaid shirt is Bill Walsh, leader and person responsible for the organization of the club. Field days run by the Butler County Sportsmen's Council highlight a full program of activities run by the boys.

Moravian College Forms First Field Trial Club

The Moravian College Field Trial Training Club, formed by students of the Bethlehem, Pennsylvania, liberal arts college, is believed to be the first such organization on a college campus. The purpose of the club is not simply to train dogs to find birds in season and bring them in after they have been shot but also to interest students in the year-round recreation to be had in the field.

Sixteen students are training an equal number of cocker spaniels to raise and retrieve at the present time. Both students and dogs could be considered trainees since the students are learning proper training methods from experts in field trial training.

The organization was founded by Dr. J. Richard Jones, head of the history department at Moravian. Cocker spaniels were selected as the dogs to train partly because of Dr. Jones' interest in cockers—he has a kennel of his own—but primarily because of the availability of breed. Cockers outnumber their closest American Kennel Club rival in registrations by better than three to one.

Ten dogs and their trainee-trainer masters started the group last year. Six of these dogs were gifts to the students by Judge Townsend Scudder of Greenwich, Connecticut. Judge Scudder has been working for more than fifty years to improve the American Cocker Spaniel into a full fledged field dog, and the short-bodied, up-at-the-shoulder cocker of today is the result of his exploitation of blood lines from the long, low dog of the turn of the century.

These dogs are given to the students with only one string attached—at the end of a year final transfer of ownership will be made after a competent field trial judge has certified to their being fully trained for the field. When this is done the dog becomes the property of the student who has trained him. At the close of a year a banquet is held at which the transfer of ownership is made.

Ten cockers have been contributed this year by Judge Scudder with the same type of arrangement. John J. Jacobson of New

York City has also given four dogs from his "Penhouse Kennel" to the project. Two first-year dogs from Dr. Jones' kennel round out the sixteen training in this year's program.

Clyde Heck, Allentown, Pennsylvania, field trial judge, meets with the students every two weeks to check their progress and give them pointers. The first steps, of course, are the teaching heeling and humping. "Humping," the term for sitting down, was imported with spaniels from England where when it was said the bird was "hup" the dog was to sit down, or at least so the story goes.

Training progresses rapidly through the retrieving of inanimate objects to the point where pigeons are shot down and retrieved. From here on, it is a question of training to fine points to discover the championship caliber dogs.

Daily training sessions are held by each student on campus in an effort to have the dogs in top shape for weekend club trials with pigeons at Dr. Jones' home just over the Northampton County line in Bucks County. Corn stubble and grass fields bordered by small deciduous stands, provide excellent training cover.

The Moravian club participates in both dual meets and clinics. So far, these have been held with city kennel clubs but their hope is that some day the Moravian College sports schedule will show not only Moravian vs. other college teams in football, baseball, etc., but also list scheduled field trials with other college clubs.

Last fall the group held a field trial clinic with the Long Island Kennel Club at which Clarence J. Pfaffenberger, trainer and author of many articles on training, judged and criticized the performance of the dogs. A dual meet for this spring is scheduled with the Albany Field Trial Club. The meet will be held on Mr. Jacobson's game preserve in Far Hills, N. J.

One of their best prospects this year is "Penthouse Riptide" a black cocker which last year was the outstanding dog for Mr.

Jacobson in the East's Puppy Prospects Stakes. He is now being trained for the open-all-age stakes and shows great promise.

Dormitory students who are club members keep their dogs in kennels which were built on an unused corner of the campus. Their masters are completely responsible for the health and care of the dogs.

No sportsman needs to be told the value of a good dog for the finding of game or the retrieving of it—particularly wounded birds—but possibly the inclusion of training and hunting with dogs as part of a college sports program does take clarification. Briefly it is this: The club feels that though the team sports of football and basketball are fine recreation mediums while in college, the ability to pursue them following graduation is very limited. However, the limitations on healthful days outdoors with a dog are only those of time.

Dr. Jones feels that the small cocker is particularly fitted for hunting in the typical cover of Eastern Pennsylvania. He believes that his group will go a long way in dispelling the dogman's myth that a good home dog will never be a good field dog.

Answers to Sportsmen's Quiz

1. b. False
2. a. True
3. b. Laurel
4. a. True
5. a. True
6. a. True
7. b. False
8. d. Rabbit



PATCH-SHOOTING FIELD DAY—from Page 14

Spot hit another bird about halfway up the hollow and, as it was running, began working out the trail. He pattered with him all over the bottom and, crossing the stream, pinned him down on the hillside. The grouse flushed wild as we crossed the stream and cut back over us. We both pivoted and the guns went off together.

"Not much doubt about that bird being dead," I said as the dog brought him in.

"Yeah," smirked the Oldtimer, "Guess you're teaching me bad habits."

The next cover was larger than the first two, ranging over a piece of deserted farm land. It was composed of aspen, birch and popple whips with a ground layer of weeds and brush about two feet high. As we walked through, the dog ranged past me and came on point in one corner of the cover. About the same time, I heard a bird flush near the Oldtimer and a second later, one very final shot.

"Point!" I called.

"You take him" he answered, "I've got to find this one before we lose him."

I walked in past the dog and a wood-

cock busted out to my left. I waited until he was in the clear and then, seeing that the dog was still on point, told him to fetch. The other bird went out behind me and almost reached the cover's edge before I folded him.

I picked up the first bird as Spot retrieved the second. As he brought it to me, I could hear the Oldtimer coming through the whips towards me.

"Bird, Bird, BIRD—COMING AT YOU!"

The woodcock flared up and wide as he saw me and I let him swing out of the Oldtimer's direction before I killed him.

"Having yourself a time, aren't you?" said the Oldtimer as he picked up the last bird. "Good thing you have two bird dogs along."

I ignored the sarcasm in his tone as I put the bird in my vest. Then, looking around for the dog, I asked the Oldtimer.

"Last time I heard him was over there," he said and we ran through the brush in that direction. When we found Spot, he had been on point so long that he had laid down, still pointing, but comfortably.



Calling the dog to heel, we walked slowly back to the car. As we stowed our gear, I checked my watch—two hours even. The Oldtimer grinned happily at me and, having solemnly shaken hands, we started on the drive home.

TURKEY HUNT—from Page 15

As I remember it, the other guests showed their host the courtesy of passing judgment on samples from each of the three.

Then Mr. Gee added that we might enjoy another of his home products—some "stingy-green," and we agreed that we would. It was then that he removed one of the tightly tied paper bags and took from it a large tobacco plant. "This," said Mr. Gee, "is what we call stingy green. It is good pure tobacco—pretty strong, but some folks like it." After sampling it they all agreed with Mr. Gee's appraisal. One pipeful of stingy green was as potent as three glasses from barrel number three.

That night, after we were shown to our bedrooms and as I laid the contents of my pockets on the window sill, I noticed the thickness of the walls of that house. It seems to me now that they must have been more than two feet through. It was built from native stone, cut by hand. It had no doubt weathered the storms of many years, only to become more resistant and solid. It seemed to reflect those qualities of character that gave identity to its occupants.

Early the next morning after a breakfast of hot pancakes, coffee, and home-made sausage we paused briefly at the barn to fill the pockets of our hunting coats with luscious ripe apples; then we were on our way down to the stream that ran back of the farmhouse and separated us from our hunting ground. Mr. Gee had told us that down the stream some distance and on the opposite side there was a farmer who owned a boat and if we called to him he would come over and get us. We followed instructions, located the farm and saw the boat tied up at the opposite bank.

Soon we got the attention of the farmer and asked if he would row us across. To this he asked who we were and where we were from. Having given him this information together with the promise of paying him for his service, he refused to help us by saying that he had no time for d - - - foreigners, particularly when they came in to shoot up local game.

At this point there seemed but one course open to us and that was to take off our clothes and wade the stream. It is true that the air was crisp that morning and the prospects of this primitive procedure were not too inviting; but gaining courage and losing clothes we held our guns and wearing apparel above our heads and made the crossing. I recall that the stones were so sharp on the stream bottom that I put on my shoes.

Several hours later the sun had come out and was shining quite brightly. I was sitting under a tree with my shoes off trying to dry them in the sunshine when I heard several shots on the opposite mountainside. Then suddenly there was a swish through the air and below me I saw my first wild turkey land on an oak tree. Its feathers glistened in the sunshine against the red and yellow autumn leaves. Equipped with a 12 gauge '97 Winchester loaded with four drams of black powder and BB shot I fired. It seems now as though the mountains shook on their foundations as the resounding boom echoed and re-echoed up and down those wooded valleys. Recovering my physical and part of my emotional composure I looked beneath the cloud of smoke to see my first and only trophy of its kind—a wild turkey.

OUTDOOR KIDS—from Page 11

"You know what I heard Pop say once? He said that people here talk about the birds coming home to us in the spring, but that he thinks that they go to their real home in the fall. Aside from a few hardy birds, Pop says that birds spend most of their time away from here," Jane contributed.

"When you come to think about it, I guess that's right," Billy agreed. "Most of our summer birds arrive in April or May, and they are gone again in August or September, so that only gives them three, four or five months in the north."

"Some birds don't go very far south," Billy said, carrying on the talk of migration. "I mean birds like robins, bluebirds and meadowlarks. They leave late and they

come back early. I guess some of them never get more than a day's flight from Pennsylvania."

"I suppose it's just a case of not getting enough to eat here," Jane opined. "I guess they just can't stand our tough winters," she added.

"You think that's the answer, eh?" said Billy with a grin. "Well, then, my good woman, perhaps you can explain to me why such a tiny little ball of feathers and fluff as a chickadee looks so happy on a January morning with the snow piled high and the thermometer below zero."

"Gee, I never thought of that!" answered Jane as the children turned their backs on the south and started walking down the road toward home.

DIARY OF A SMALL GAME HUNTER—from Page 3

Next to the first aid station was a razor and comb and brush set which, needless to say, were not used excessively. As a matter of fact, the razor was not used until Thanksgiving Day.

It was only an hour until dark and my stomach was gnawing. Soon, however, that gnawing was appeased as I sat up to a hot meal of beans, soup, fruit, bread, jelly, and tea.

After supper, the dishes were promptly dispatched to the strains of some dusty old records played on a relic of a wind-up victrola which seemingly holds a romantic spell over the cabin.

Carefully checking the fires, lighting up one of my excellent hand-made "Fleetwood" cigars, I blew out the lights, picked up my flashlight, and walked over to the nearby farmhouse.

Residing in this particular farmhouse is one of the best squirrel hunters in these hills, the main purpose of my visit.

Knocking on the door, amid the bark of their pup, and the cat meowing, I heard Roy's familiar voice saying "Come in."

Inside, the house was cheery and warm. We talked about the weather and hunting, and I was treated to a glass of the most delicious home-made wine. The formula is

a secret, but the main ingredients is peaches. About eighty-thirty my visit was complete.

Wednesday, November 3—Dawn was cold and gray with intermittent light rain and wind. There was little activity in the woods. Located fresh turkey scratchings early this morning but unfortunately not the turkey that made them. The leaves are practically all down now, due to yesterday's wind, and there appears to be plenty of nuts on the ground. Saw one grouse but did not get a shot. Also saw quite a few squirrel signs but few squirrels. The popular belief is that they are scarce this year but that remains to be seen.

Came in early and cut wood; started supper early. The menu for tonight is fried squirrel and baked potatoes, topped with dessert and coffee.

Went down to visit the Cooney family this evening to find out their plans for tomorrow's hunting. Very pleasant visit and nice walk home. Early to bed and early to rise.

Thursday, November 4—Sunshine and wind were the order of this day. Hunted rabbits all morning with my brother and his wife; we saw one. Then hunted squirrels in the afternoon and shot one out of four. Quit about the best time, which was 3 o'clock, and saw my brother off. Began to cook supper and cleaned the camp up a bit. My endless battle with the ever-present weens was a sight to behold. The first time I tried to crush one, on the upstairs window, the pane quite obligingly fell out. Most fortunately it did not break, as it fell in some dry weeds outside. However, I managed to take care of that when trying to put it back in. Then had to scour the camp to find another one.

As soon as the dishes were cleaned up, and some chestnuts were roasted, I checked the fires and once again headed for Roy's, to give my report and to hear his predictions on the game and weather. We swapped stories for some time and ate some very fine peach pie prepared by his wife. I went back to the cabin and settled down for the night. Or so I thought.

No sooner had I fixed the fire and crawled into bed, than a heck of a racket began in the attic. Pulling on my shoes and picking up the flashlight, I opened the door and peered into the loft. The noise ceased and nothing appeared out of the ordinary.

I had just gotten under the covers when I discovered something was running around my bed. Bouncing out again, I soon discovered the little visitor—a flying squirrel.

A merry chase followed around the bedroom, down the stairs, thru the front room and into the kitchen. I finally caught him on the trap of the sink. Now the question was . . . what to do with him in order to get some sleep. He was too cute to kill so I penned him up in an old box.

Thinking my problem solved and getting cold standing around in my Long Johns, I promptly made tracks for the sack and sleep—so I thought.

But no, brack-buzz-click-clack . . . sounds like a power saw. Then, in answer upstairs, came more noise. What a night! I must have gotten at least three hours sleep. But alas, my dear little friend died during the night.



Friday, November 5—At about a half-hour before dawn, I heard a car pull in and voices shouting my name. Sleepy-eyed and still drowsy, I jumped out of bed and into my clothes. Fog shrouded the ridge and it was not yet light enough to hunt. Rustling up the breakfast, I heard discussion of the day's hunt. Mr. Peel and myself decided to hunt squirrels and turkeys until noon. The others, including my brother and his wife, my dad, and Mr. Peel's son, went for rabbits with Peel's two dogs.

Mr. Peel and I had no sooner split up when I walked by two big does who eyed me suspiciously for a minute, then bounded off into the brush. Although it was a good morning for squirrels I saw only one which eluded me successfully. Meeting my buddy about eleven o'clock, he informed me he saw a turkey but could not get a shot.

We decided to go in for dinner and find out how the rest of our party made out with the rabbits. Inside, the tales were flying as usual. Boiling down all the facts, however, we discovered they got four rabbits between them. After dinner we set out with the dogs to find more rabbits. It was hot and there was nothing moving, except most likely the squirrels, because I was hunting rabbits. Finally, out of a pile of green briers, a large rabbit made tracks for the next mountain. Taking a quick check on the position of the dogs and other members of the party, I let go a blast of number sixes from my old single barrel as the cottontail vanished under another brier pile.

Walking up to the spot where I shot, we found nothing. The dogs walked a short distance, then came back to the brier pile. Thinking I had missed the rabbit, we tried to get the dogs to trail, but they would not. Then I noticed a bit of fur and a top wad from my shell, plus some blood. We knew then that the creature was hit. Mr. Peel's son walked over to the spot where the dog first went and there, in plain view, was my rabbit. Much to our surprise it was a clean head shot. We did not figure it would run so far after being hit so hard.

It is good policy to look very carefully, even when you think you miss, in order to prevent the loss of valuable game which would otherwise go to waste. Another rabbit was put out soon following but holed in after the crack shots blasted six rounds at him. That rabbit deserved to get away.

My pet miss of the day was waiting too long to take a crack at a grouse which was running toward me. When I did raise my gun to fire, the bird saw me and flushed behind a group of trees, thus blocking my long awaited chance.





In the latter part of the afternoon, however, I bagged a smart old gray squirrel which would supply me meat for the next day. Since my dad was not lucky enough to get a shot, I sent the rabbit along home with him that night.

Saturday, November 6—Awoke to find company in camp. Some of the other members and their family arrived to hunt for the day. The sky was overcast and a strong wind started to blow. Promises of rain were soon to be fulfilled. Eating a good breakfast, I set out for a squirrel hunt. I was only in the woods a short time when rain began to fall. I shot one bushy-tail and headed back for camp.

Dinner was about ready and I was asked to join in. That afternoon we hunted rabbits without any success. Later we went for squirrels; again no success.

But, I had the pleasure of seeing a buck and a doe slip by me cautiously and two grouse rocket out of a cedar thicket as I walked noisily by.

The way to measure your pleasure from a day in the woods is not from what you kill or try to kill, but from being alive in God's world. The tall stately hemlocks, clothed in robes of white snow . . . the rippling song sung by a falling trout stream . . . the scampering chipmunk, his cheeks filled to bursting with food for the coming winter . . . the whispering pines bent beneath a heavy wind . . . the whir of wings as a grouse or pheasant flushes out of range . . . all of these things mark a successful finish of a day in the wilds.

Sunday, November 7—Spent a quiet Sunday; folks were here for dinner. In the evening visited some of the natives and was treated to a meal of wild turkey at Mr. Rohm's. Thus, I began a second week in the Perry County mountains.

Monday, November 8—Beginning to look more like fall now; temperature at seven o'clock this morning, 30°. Hunted with Frank Cooney this morning. We put out several rabbits and two squirrels. Frank bagged one squirrel and I missed one. Saw a deer; also a grouse which would have been a beautiful shot had not the season closed on Saturday.

Coming into camp I managed to stow away some cheese and crackers, cakes, pickles, etc. Feeling a little better, I set my course for about an eight mile trek through the ridges and ravines. Making a huge circle, I saw two more grouse and three squirrels. However, I did not get any shots. The afternoon turned warm and windy, thus hindering squirrel activity. Finding a fairly dry sunny spot, I lay down and absorbed some of nature's greatest cure for all

ills—warm sunshine. After a short time Old Sol began to sink in the west, and I began to make tracks.

Arriving in camp, the usual chores awaited me; splitting wood and cooking supper. Baked potatoes, beans, jello, and tea were on the menu. After eating and finishing the dishes, I lit up a cigar and checked my fire, then went up to Roy's.

We discussed the game situation, weather, and crops. I told him I thought I knew where there were a lot of squirrels and he agreed that it would be wise to investigate it.

I retired with the thought of an exciting hunt on the morrow.

Tuesday, November 9—Upon waking in the morning, I found it cold and raining. The temperature at seven-thirty was 32°, so I decided today would be a fine time to do some work.

For breakfast I had hot cereal, coffee, bacon and eggs, and fruit. Brought in a supply of wood for both stoves and then began a job of cutting locust logs for the stove. This job was wet and cold, but by going inside occasionally to check the fire and continually chewing on some odds and ends of food, I broke the monotony. Before long, the wood pile was restocked and the clearing I made after pruning the trees and cutting out the brush, looked fine.

If all goes well, in another few years we will have a stand of nut trees which will provide food for game. By conservingly using the land, a camp can get a supply of wood and many other uses from it.

The mailman informed me that a package from the Department of Forests and Waters

had arrived in town, and he would deliver it soon. I was anxious for him to do so, as they were signs reminding sportsmen to be careful with fire.

Wednesday, November 10—Early this morning, I was awakened by a mouse trap going off. Investigating, I found another flying squirrel. Bringing him downstairs, I released him from the trap which held him by one front foot. He most graciously thanked me by trying to bite the end of my finger off. I very promptly left him go, plus some cute words too numerous to mention. Then the chase was on, only, however, after my donning a pair of heavy gloves. After cornering him in the wood pile, I caught him again, but did not have my box to put him in, so had to let him go in order to find it. Looking for him the second time proved futile.

Temperature at 8:30 was 40° and rainy. Heading for the clover field in hopes of jumping a rabbit or two, I walked around unsuccessfully for an hour or so. When at last I stopped near an old stone fence by the stream, a large rabbit jumped out. Naturally, being such a clear shot, I missed.

Going into camp at noon, the temperature was 60° and wasps were everywhere. Looking again for the flying squirrel, I surmised he was hiding behind the wood pile. Moving the pile, piece by piece, I soon had a cord of wood in the middle of the kitchen floor and still no squirrel. Now I was convinced that he must have gotten away, most likely through the hole in the baseboard.

(To Be Continued Next Month)





hog-dressed are very rare in spite of the many hundreds of estimations above that figure each doe season. Number 4 class will correspond to legal antlered bucks of that age.

For legal bucks there can be no classification of types, for, as has been stated previously, the number of points or size of rack is not necessarily dependent upon age. In some counties of the state, legal bucks will average less than 100 pounds, while in the best counties the average will not exceed 120 pounds. The many stories that are told each year concerning the large bucks weighing over 200 pounds hog-dressed are in most cases fallacious. Most of these will tip the scales at less than 150 pounds. The writer does not mean to infer that there are no bucks killed in Pennsylvania which weigh over 200 pounds for there are several each season, but deer of this size are infrequently killed. The largest deer weighed by the Research Division in five years tipped the scales at 196 pounds and the next largest weighed 177 pounds with comparatively few larger than 150 pounds.

As for shoulder height, it will be surprising to many to know that the largest bucks will not stand as high as the waist of an average man. Legal bucks will average about 37 inches at the shoulder which is about hip height on a man. This over-estimation in shoulder height causes many hunters to over-shoot running deer. When a deer is in full stride and literally "combing his ears with his hind feet," its belly may be within a few inches of the ground.

Predation

Because of its size, the whitetail has few natural enemies in Pennsylvania. Probably the stray dog kills more adult deer than all other predatory species combined in this state. Undoubtedly wildcats kill a few deer each year, but they are so restricted both in numbers and range that the effect of their depredations upon the herd would be negligible. It is the opinion of many game managers that the predation of a controlled number of bobcats on a deer herd is beneficial rather than harmful because the weak, diseased, and small individuals are removed and this tends to build up the size and hardiness of the herd. Foxes kill some

FACTS FOR DEER HUNTERS—from Page 6

fawns each year, and it is likely that other of the larger predators may occasionally take a fawn. Although bears will feed readily upon any deer which are killed and left in the forests by the hunters, they do very little of their own killing. If it were not for the fact that bears are hibernating during February and March when deer are in the poorest physical condition and consequently easiest to catch, it is quite possible that the predation by these animals would be of some consequence.

In the remainder of the article, it is the writer's desire to give the deer hunters some information concerning the many facts about deer and deer hunting which cause heated discussions in hunting camps every year.

There is one subject about which every deer hunter should have a complete understanding. It is astonishing the great variety of ways that a large number of hunters have to tell bucks from does without actually seeing antlers. Many hunters rely upon these "signs" and take a chance shot usually to their sorrow. Many are of the opinion that only bucks snort. Actually does are more inclined to snort than bucks, as bucks are more likely to sneak away with as little noise as possible. Another common belief is that a deer with its "flag" down is a buck and those with tails up are does. This may hold true in some cases but again may be entirely reversed. Both bucks and does normally run when frightened with their tails up.

Some tenderfeet believe the large bucks lead the herd and will often take a shot at a large deer in the lead of several others even though they may be too far away to see antlers. Most of the time the older bucks are inclined to hold back and usually will be found in the middle or to the rear of a number of deer walking in a group. However, like most of the other cases, the reverse may be true and the buck may be leading, or it is entirely possible that in a herd of fifteen or twenty deer there may be no legal bucks.

A bit of advice often offered the tyro is that if a buck has curved horns he is sure to have points. This is again a fallacy as there are many spike bucks which have large curved antlers that are bare of points the entire length. Numerous hunters are convinced that they can tell a buck track from a doe track in the snow. No one can say positively that a certain track is made by one sex or the other. According to the general belief the tracks of male deer are rounder than those of the female which are supposed to be long and narrow. This is often true, but the very opposite is not uncommon. For the person who is convinced he can tell the sex of deer by their tracks, the writer suggests he go to a taxidermist where he can look over several dozen feet and then check his results with the taxidermist's tags.

Many deer hunters have never heard a deer use its vocal powers. A fawn that is hungry will bleat very much like a lamb, and as it grows older its voice deepens. A fawn when frightened, particularly when being handled by man or attacked by some animal, will cry piteously with a shrill

waaaa, resembling somewhat the cry of a young calf. A doe will call with a loud baaa not unlike an adult sheep. Adult deer when attacked or when badly wounded will oftentimes utter a cry similar to that of fawns under similar circumstances, except that the voice of the adult deer is louder and deeper.

The sound most rarely heard is that of a buck in a fighting mood. This can only be described as a grunt. This sound may be heard during a fight between two bucks or when one is imminent. Also, bucks will grunt in this same manner when following a doe in rutting season. Beside their vocal powers, deer make two different nasal sounds. The common snort of fright is familiar to many deer hunters. This is accomplished by quickly expelling the breath through the nostrils and sounds much like a whoosh or whistle. This sound is used as a warning to other deer that there is danger nearby. The other nasal sound is used only by bucks and usually follows a victorious fight. After having bested another buck, the victor will raise his head as high as he can and blow through his nasal passages with a series of short, quick snorts followed by the sucking in of a full breath with the nostrils almost tight shut which produces a loud sucking sound.

A deer that has sensed danger but cannot locate it or is not sure that there is real danger will, in many instances, stand and stamp its front feet. Much of the time one foot will be stamped alone, but other times one foot and then the other will be stamped and the procedure may be continued for several minutes. The deer lifts its foot several inches above the ground and stamps sharply thus producing a dull thud. This is also a warning to other deer to be on the alert. Only does and young bucks make a regular practice of this stamping as older bucks are more suspicious and will usually run or sneak quietly away at the least intimation of danger.

A subject of much controversy concerns the scent glands of deer. One set of glands is located between the hooves. These throw off the strong scent which enables a hound to follow them so easily. On the inside of the "knee" joint of each hind leg of a deer is a tuft of reddish-brown hair that covers another scent gland. These glands appear to expel an odor that another deer can detect long distances and may be used as a means for fawns to follow their mother when running at top speed through thick brush. It is believed that a fawn can signal to its mother that it is in danger with these glands. When a deer is frightened, these tufts of hair will stand out very noticeably, and this is also believed to be a method of silent warning to others of a herd. Both sexes of deer will regularly urinate upon these hair tufts while rubbing them tightly together.

Deer hunters will often remark that they cannot understand how a deer can run across a jumble of rocks without occasionally breaking a leg. This is not an uncommon occurrence, although the leg bones of a deer can withstand a severe twisting without breaking. Deer care for a broken leg ad-

mirably, and will not touch it to the ground until the break is mended. Within a month to six weeks a deer will again be walking upon a fractured leg, and within two months it will be as strong as ever. Deer may be killed which have two or three healed fractures on one leg.

The senses of smell, vision, and hearing of deer are all acute. Hunters are inclined to underestimate these hunters and lose opportunities to get shooting at deer because they do not stand or sit still while on watch. The hunters who complain of having gone buck hunting for ten or fifteen years without having fired a shot have only themselves to blame in most cases. These hunters will perhaps take a watch standing in a road or an open field or some other spot where the deer can see them long before they come within shooting distance. Such acts while on watch as coughing, clearing the throat, stamping feet to keep them warm, loudly blowing the nose, lighting a pipe or cigarette, changing positions in order to see better, and many other movements of this type are likely to mean the difference between success and failure. Rapid movements are easily detected, so when a deer is sighted coming toward a hunter he should raise his rifle very slowly into position. In "sneak hunting" the person who walks slowly and cautiously will see far more deer and have more opportunities for shooting than the person who walks rapidly and carelessly through the woods, even though the latter will cover much more ground.

Deer are excellent swimmers and will not hesitate to take to water to escape hunters or merely to reach a foraging site. In summer, fawns and even older deer will at times run playfully back and forth across a shallow stream. The Pennsylvania Game Law prohibits killing any big game taking refuge in or swimming in any stream, lake, or pond.

When walking on ice, deer have the ability to spread their hooves so that they stand apart two inches or more. They stand high upon the very ends of their hooves and attempt to "dig in" with the sharp points. Deer will, however, sometimes slip and even fall on ice.

Does will fight as savagely as bucks at times. These differences usually occur over a choice bit of food such as apples, beech-nuts, or acorns. Both does will rear up on their hind feet to their full height and literally box with their front feet. They will cut and bruise each other, but their fights are usually of short duration.

In the wild, deer appear to be comparatively disease-free except in a few isolated cases. However, when the annual winter loss comes in February and March because of a lack of nourishing food, most of those which die have contracted pneumonia. The disease problem is another factor in favor of an occasional antlerless season as too great a concentration of any animal, including man, is inclined to cause epidemics of one disease or another. The toll of some devastating deer disease could in a very short time diminish the breeding stock to a point of near extirpation.

The Game Commission has never released any deer with an ear notched as a means of identification. The notched and torn ears are caused for the most part by fighting and occasionally by other accidents such as by striking sharp branches when running at

full speed. The only means of identification employed by the Commission is a metal cattle ear tag bearing a number and the address of the Commission. These have been applied to a number of native fawns in order to secure data concerning the range, age, growth rate, and other life history problems.

No deer have been stocked in Pennsylvania from Michigan or any other state since 1925, and yet according to certain successful hunters a great many "old Michigan bucks" are killed each season. The average life of deer in Pennsylvania is estimated to be between two and three years, and the possibility that any of these original Michigan deer could still be alive after twenty-four years is indeed remote. These big bucks are just well-fed Pennsylvania deer, and any Pennsylvania buck which is supplied with proper nutrition throughout its life will weigh from 175 to 225 pounds, or more, at maturity.

Does with antlers and bucks still in the velvet in hunting season are killed nearly every year. Either phenomenon probably arises from an injury to the sex organs or from a malfunctioning of the endocrine system.

Deer have no incisors in the upper jaw, and the story that "I killed a deer so old that it had lost all of its front teeth" originates from this anatomical peculiarity.

A few hints for the beginner who has never dressed a deer may be of value. The first rule is to never go near a big game animal until you are sure it is dead. Many hunters have been seriously injured when they have become excited and attempted to "stick" their deer before it had stopped struggling. To hog-dress a deer the hunter should turn it over on its back and stand straddle of it facing its tail. The knife is inserted under the skin between the forelegs and an incision made in the skin only from that point to within about eight inches of the base of the tail. Again insert the knife at the same point between the forelegs and this time penetrate into the thoracic cavity above the diaphragm. When the second incision has been started, insert the first and second fingers of the hand not holding the knife and cut between them while holding the abdominal wall well away from the internals. If the stomach or intestines are cut, the meat will become contaminated and decomposition will be more rapid. Pull the stomach and intestines out and cut them free. The liver should be left attached within the body cavity until camp is reached. (The liver of deer compares very closely to beef liver in quality and is a highly nutritious food. A deer liver has no gall bladder.)

When hog-dressing a deer it is well to remember that the smaller the incision the easier the animal will drag. Most deer are "dragged in" and the method recommended is a rope around the neck or antlers and a stout stick tied into the other end as a handle. Deer should never be dragged hind parts first as this is the wrong way of the hair and is much more difficult. It is very dangerous for a person to carry a deer upon his back as it may appear to another hunter at some distance to be a live animal walking through the forest.

When camp is reached, the incision in the abdomen should be lengthened to the base of the tail and the bone holding the hind



legs together (the pelvis) should be severed. This will permit the removal of the terminal portion of the large intestine and will also allow the abdominal cavity to be spread wide for rapid cooling. The liver, diaphragm, heart, and lungs should be removed and the inside left as clean as possible. The deer should then be hung with the head up so that all blood will drain out instead of lying in the thoracic cavity. Blood left on the inside will putrify very shortly and impart an unwholesome odor and taste to the meat. It is recommended, particularly when the temperature is not well below freezing, that the deer be skinned out as quickly as possible as the hide tends to hold the body heat and causes the flesh to spoil rapidly. Many hunters cut off the scent glands between the knee joints of the hind legs as soon as they kill their deer. These glands, if left on the animal, are supposed to cause the meat to become strong, but there appears to be no foundation for this supposition.

In conclusion a few words of advice are offered to those persons who may at some time own a pet deer or be around where deer are kept in captivity. A captive buck can be an exceedingly dangerous animal, even though it appears to be perfectly tame and docile. After association with humans, a buck is likely to lose its natural timidity and may become vicious during the rutting season. The change from a friendly pet to a dangerous killer usually comes over night without any forewarning. Penned bucks should be watched closely as soon as they rub out of the velvet in the late summer or fall. The best method is to observe the position of a buck's ears before entering a pen. A buck with its ears forward is to be trusted, but one with its ears laid back on its neck is likely to charge the first person entering the inclosure. Because of their great strength and unbelievably fast attack, a person has very little chance to defend himself and is lucky to escape with his life.

A STORY GOES WITH IT—

from Page 10

so we took his rifle (which was returned when he paid the penalty) and the license for evidence and security.

We decided to take the back road to Troxell's, the road that bounds Auxiliary Refuge 19. There was a light snow on the ground and as we approached the wire we could see four hunters apparently tracking something down from the hill towards the refuge. We parked and watched from the car until the men came down to the road some seventy-five yards behind us; they crossed to the wire and stood for a short time beside one of the rules and regulations signs. Glenn and I debated as to whether both of us should go to Troxell's for the information about the illegal or perhaps if one should work around the refuge. Finally we decided that we would both go and I looked back to see the four hunters walking across the road away from the wire.

As we started up the road, I happened to look back just as three of the four hunters slipped under the wire and went into the refuge. In a matter of a few minutes we had these offenders rounded up and Glenn was following the track of a deer the party claimed to have crippled severely. While he was gone the hunters and I watched five does and a nice six point enter the refuge—the only man having a rifle handy being the one who claimed to have wounded the deer Glenn was trailing. Kitchen returned after half an hour to report that the wounded deer was a legal buck and that he was still running hard. The three men made arrangements for paying their fines for entering a refuge. (We found out later in the day that the buck had been hit by another hunter and that our refuge entering friends were cutting in ahead, hoping to get the animal first.)

Our next step was to contact Troxell, find the spike buck and see what we could learn about its demise. After conferring with Troxell, Kitchen went back to pick up the fine from our Ohio hunter while



Troxell and I went to drag out the spike. We had a walk of a mile or so but were unable to learn anything since the area had been trampled by many hunters. So we dragged out the carcass and waited for Glenn. He came back with the fine and a tip—a native had told him about someone originally from the vicinity who had been living in Maryland for the past seven years and who had been back during the small game season and hunted on a resident license. However he hadn't given Glenn a name and it was assumed that this person had left the state. Still we decided that we would investigate and managed to learn the chap's name and also the fact that he was not only still in the area but that he was staying with a relative and was probably out

hunting. It was then too late to go looking anywhere so we had another session of waiting for a homecoming. About six o'clock our man arrived and once more, after considerable discussion and protestations of innocence the game fund was enriched.

After a large supper, a telephone call home once again sent us to pick up an illegal deer that had been hung up by several sportsmen and again there were no clues. By now not only was the flesh growing weak but the spirit was inclining the same way so we pointed the hood south, delivered the illegals to the county home and we headed for a little sleep . . .

"1201 Comp inv 4 prosec 4a Hdq Off Work 10 a Acc Kitchen PV etc Glasgow 5 prosec 11p."

LEAD 'EM OR WEEP—from Page 22

snipe the delayed snap is still tops. I was well acquainted with some of our old grouse shots and they universally used this method of shooting.

Now we come to the swing with its many variations. There are more versions of swing than fleas on a dog. No two men swing the same and it follows that no two men use the same amount of lead. If one man asks another how much lead he uses on a certain shot and tries to use it himself, the chances are he will miss. Swing in one of its variations is always used by any trained wing shot. The position is body balanced on the feet, the feet not moved. The swing starts at the ankles. The body may twist at the waist on wide angle shots. The body is on a pivot and the gun swings on a straight line from where it started. It's difficult to change a swing, when it's once started. If it's pointed high the charge will go high even if you see it when the trigger is pulled. Also the reverse is true. Any kind of swing in which the gun travels *faster* than the mark reduces lead. The swing may be so fast, that no conscious lead is taken. You just shoot in front of your mark. This rapid swing was used by a good many of the old time market hunters of wild fowl. A few who I have talked with in their old age used this style and limited their range to forty yards. They shot for meat and ammunition cost money.

Fred Kimble, who apparently was the king of them all, killed

fifty-four ducks straight at all ranges up to sixty yards, according to reliable accounts handed down. He used, I believe a single barrel gun of eight bore.

The deliberate swing is commonly used in waterfowl shooting and some types of field shooting, where the game is in sight in open cover. In this method the hunter swings the gun past the game from the rear the gun moving along at the estimated correct lead with the trigger being pulled as the gun is kept moving. The swing is carried through just as in golf or batting a baseball. It is important that the gun be kept moving at the same speed. To slow down or stop it to pull the trigger, means shooting behind the game. This is the style used mostly in pass shooting on duck or goose shooting and long range shooting in general. It has little or no place in upland shooting.

Lead is a combination of mathematics and variables. The mathematics run about like this. Grouse, Quail and Pheasant fly about sixty feet a second, more if scared. In a crossing shot at forty yards with a standard trap load, the lead would be about eight feet. Maximum loads would cut this between one and two feet. The variable is the speed of your swing and reaction time. Deduct this from the mathematical lead and you have your personal lead for that particular shot. When you can do this on a variety of shots, you are well on the road to solving Old Ben's "A'int."

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of September, 1949

ADAMS—\$200

Swisher, Scott, R. D. 1, Fairfield. Assisting in the killing of two deer in closed season \$200.00

ALLEGHENY—\$135

Burgoon, Robert Clark, 516 N. Highland Avenue, Oakdale. Dogs running game in closed season 10.00
 Butterfield, Clare Kenneth, 1911 Grandview Avenue, McKeesport. Possessing loaded rifle in vehicle standing along highway 10.00
 Celli, Redo, 29 Cole Crest St., Carnegie. Training dog in closed season 10.00
 Chartener, Raymond, R. D. No. 4, Box 405, Pittsburgh 9. Training dogs in closed season 10.00
 DeVitis, Emmitt Anthony, 716 Collier Avenue, Carnegie. Training dogs in closed season 10.00
 Feeney, Owen, 522 Foreland St., N. S. Pittsburgh. Hunting without resident license 20.00
 Huddleston, Ollie L., 1614 Harland Avenue, Coraopolis. Possessing loaded rifle in vehicle standing along highway 10.00
 Ludwich, Francis Marion, 442 Ocola St., East McKeesport. Training dog in closed season 10.00
 Pradette, Albert, Tyre. Possessing loaded shotgun in vehicle standing along highway 10.00
 Rebel, Eugene William, R. D. No. 1, Wesford. Using a car as a blind to take game 25.00
 Smith, Roy John, 4039 Vinceton St., Pittsburgh. Training dog in closed season 10.00

ARMSTRONG—\$300

Anthony, Ralph E., 1417 Orr Avenue, Kittanning. Attempting to take a deer in closed season 100.00
 Craft, Lawrence F., R. D. No. 5, Kittanning. Attempting to take deer in closed season 100.00
 Gould, Floyd T., R. D. No. 1, Rimer. Attempting to take deer in closed season 100.00

BEAVER—\$20

Barkfelt, Ray Thomas, 65 Beaver St., Fallston. Hunting without resident license 20.00

BEDFORD—\$220

Bair, Eugene John, Saxton, Hunting without resident license 20.00
 Emerick, Earl Leroy, R. D. 1, Hyndman. Possessing parts of deer in closed season 100.00
 Robosson, Charles Woodrow, Hyndman. Possessing parts of deer taken in closed season 100.00

BERKS—\$10

Heffner, Donald Carl, R. D. No. 1, Wernersville. Possessing loaded rifle in vehicle standing along highway 10.00

BRADFORD—\$45

Ackley, Jesse Howard, R. D. No. 6, Towanda. Possessing live raccoon without permit 25.00
 Zaner, Nelson Harold, 317 Chemung St., Sayre. Failure to display license tag while hunting 20.00

BUCKS—\$25

Weitz, Jr. Ralph William, R. D. No. 2, Quakertown. Raising, selling, or otherwise disposing of game without propagating permit 25.00

BUTLER—\$40

Moon, Harrison R., R. D. No. 1, Butler. Possessing live raccoon without permit 25.00
 Vicent, Arthur P., 418 Slippery Rock. Dog chasing and killing wild rabbit in closed season 15.00

CAMBRIA—\$50

Burns, Fred, Box 514, South Fork. Training dog in closed season 10.00
 Fabe, John James, R. D. No. 1, Mineral Point. Training dog in closed season 10.00
 Piranuzi, Pete Geranuzi, Box 34, Colver. Dog chasing small game in closed season 10.00
 Westover, Jr., Donald Aiden, Hastings. Hunting without resident license 20.00

CAMERON—\$100

Lewis, Edward George, R. D. No. 2, Emporium. Possessing deer taken in closed season 100.00

CARBON—\$10

Serfass, Stanley Alfred, R. D. No. 3, Lehighton. Training dogs in closed season 10.00

CENTRE—\$50

Fisher, Russell Charles, Wingate. Possessing unloaded rifle larger than .22 long not securely wrapped in vehicle in motion along highway between 5 p. m. and 7 a. m. 25.00
 Seace, Amalong Harmon, 2nd St., State College. Shooting within 150 yds. of occupied building 25.00

CHESTER—\$60

Moses, Fred Earl, R. D. No. 1, Spring City. Failure to report shooting accident causing injury to self 25.00
 Shantz, Webster Leroy, R. D. No. 1, Spring City. Dogs chasing small game during closed season 10.00
 Wright, Edward Thomas, R. D. No. 1, Spring City. Failure to report shooting accident causing injury to another 25.00

CLARION—\$1,358

Ashbaugh, George M., R. D. No. 2, Summerville. Killing deer in closed season 100.00
 Beichner, Bernard J., Shippensville. Assisting in killing deer in closed season 100.00

Beichner, Charles H. Shippensville. Possessing parts of an illegal killed deer 100.00
 Ferringer, Noble B., R. D. No. 2, Sligo. Failure to tag deer 23.00
 Fulton, Ronald Eugene, Shippensville. Dogs chasing game in closed season 10.00
 Geer, Raymond, R. D. No. 1, Summerville. Killing deer in closed season 100.00
 Hummel, Clark Hennery, Fryburg. Killing deer in closed season 100.00
 King, Richard A., R. D. No. 1, Clarion. Hunting deer in closed season; Possessing loaded rifle in vehicle in motion along highway 125.00
 Quigley, James E., Star Route, Mable. Failure to report deer killed for crop damage 100.00
 Rieu, Odilon L., Sturgeon. Possessing loaded rifle in vehicle in motion along highway; Hunting deer in closed season 125.00
 Weaver, Bernard A., Snyderburg. Assisting in killing deer in closed season 100.00
 Weaver, Frank T., Lucinda. Hunting deer in closed season; Possessing loaded rifle in vehicle in motion along highway 125.00
 Wolbert, Gervase, Snyderburg. Possessing loaded rifle in vehicle in motion along highway; Hunting deer in closed season 125.00
 Wolbert, Regis, Snyderburg. Possessing loaded rifle in vehicle in motion along highway; Killing deer in closed season 125.00

CLEARFIELD—\$70

Brubaker, Robert Earl, Rockton. Hunting without resident license 20.00
 Lundgren, Wilbert Gene, 416 W. DuBois Ave., DuBois. Gathering apples on State Game Refuge 25.00
 Smith, Cornelius Jay, R. D. No. 1, DuBois. Possessing a 30-30 Calibre rifle unwrapped in a vehicle in motion on highway between 8:30 P. M. and 5:00 A. M. 25.00

CRAWFORD—\$30

Feldmiller, Richard Emery, R. D. No. 1, Conneaut Lake. Shooting at protected bird 10.00
 Hubbard, James Edward, R. D. No. 1, Conneaut Lake. Shooting at protected bird 10.00
 Rhodes, Gerald David, R. D. No. 1, Conneaut Lake. Shooting at protected bird 10.00

CUMBERLAND—\$45

Hart, Edward, R. D. No. 2, Carlisle. Lending hunting license (tag) to another 20.00
 Rishar, Anthony Vernord, Boyd St., Summerdale. Hunting game on Sunday 25.00

DAUPHIN—\$85

Keefer, Earl E., R. D. No. 1, Millersburg. Killing one rabbit over daily limit 10.00
 Riley, Roland, 1915 Franklin St., Route 89, Hbg. Hunting game on Sunday 25.00
 Rishar, John, Eagle Heights, Middletown. Hunting game on Sunday 25.00
 Moun, Armstead, 238 Highland St., Route 89, Hbg. Hunting game on Sunday 25.00

DELAWARE—\$20

Lawson, Ernest Moffatt, 405 Maple Ave., Yeadon. Failure to display license tag while hunting 20.00

ELK—\$75

Kirkwood, Claude LeRoy, Hallton. Possessing loaded rifle in vehicle in motion along highway 25.00
 Lindsey, Jr., Harry Milton, Hallton. Possessing loaded rifle in vehicle in motion along highway 25.00
 Young, George Edward, 624 Third Avenue, Johnsonburg. Possessing loaded rifle in vehicle in motion along highway 25.00

ERIE—\$10

Long, Stewart E., 3909 Sassafrace St., Erie. Possessing loaded rifle in vehicle standing along highway 10.00

FAYETTE—\$10

Stimmel, Glenn, R. D. No. 1, Grindstone. Dog chasing game in close season 10.00

FOREST—\$300

Eller, Arthur Lester, Jr., Marienville. Possessing parts of deer taken in close season 100.00
 Heasley, Clarence G., S. Forest St., Marienville. Possessing parts of deer taken in close season 100.00
 Hudepohl, John E. R., S. Forest St., Marienville. Possessing parts of deer taken in close season 100.00

GREENE—\$120

Baily, George Milton, Carmichaels. Using an auto to hunt or kill game 50.00
 Bristol, Rollins Lawrence, 595 Ross St., Waynesburg. Using an automobile to hunt or kill game 50.00
 Waters, Harry Dewey, Box 132, Carmichaels. Failure to display license tag while hunting 20.00

INDIANA—\$30

Blatt, George Daniel, R. D. No. 2, Indiana. Hunting without resident license 20.00
 Horonzy, Frank Joseph, Iselin. Dog chasing small game in close season and killing 10.00

JEFFERSON—\$365

Caylor, Lloyd Ivan, R. D. No. 1, Brookville. Possessing loaded rifle in vehicle in motion along highway 25.00
 Caylor, William Henry, R. D. No. 1, Brookville. Possessing loaded rifle in vehicle in motion along highway; Possessing parts of deer taken in close season 125.00
 Costne, Victor Albert, R. D. No. 2, Brockway. Depositing garbage on State Game Lands 25.00

Mancuso, Samuel, 1724 Bond St., Brockway. Depositing garbage on State Game Lands	25.00	Rinehuls, Henry Calvin, Keating Summit. Failure to display license tag while hunting	25.00
Marthers, George William, R. D. No. 2, Brockway. Possessing cartridges larger than .22 Cal. Long Rifle not securely wrapped in vehicle in motion along highway between 8:30 P. M. and 5:00 A. M.; Refusing to accompany officer after arrest	125.00	Sanford, Harold Burton, 21 Woodlawn Avenue, Coudersport. Possessing a fawn deer in close season	100.00
Preston, Robert Joel Box 16, Brockway. Possessing loaded rifle in vehicle standing along highway	10.00	SCHUYLKILL—\$25	
Preston, William Alexander, Box 16, Brockway. Possessing loaded rifle in vehicle standing along highway	10.00	Mullin, William Edward, Grove St., Cressona. Possessing a loaded gun in vehicle in motion along highway	25.00
Ross, Jr., Howard Dean, R. D. No. 2, Leechburg. Hunting without resident license	20.00	SOMERSET—\$10	
LACKAWANNA—\$10		Shaffer, Dwight Eugene, R. D. No. 1, Central City. Attempting to dig a groundhog out of other than in a cultivated field	10.00
Supera, Max, 350 Adams Ave., Scranton. Possessing protected bird	10.00	VENANGO—\$10	
LANCASTER—\$25		Vogus, Harry E., 733 Liberty St., Franklin. Possessing loaded rifle in vehicle standing along highway	10.00
Forry, Mrs. Helen N., R. D. No. 1, Littitz. Permitting dog to chase and kill one rabbit in close season	15.00	WARREN—\$100	
Good, Clarence Herr, R. D. No. 2, Manheim. Training dogs in close season	10.00	Shirley, Herman Edgar, 209 Monroe St., Warren. Possessing parts of deer taken in close season	100.00
LEBANON—\$25		WASHINGTON—\$190	
Bata, Paul Henry, 1004 Cornwall Rd., Lebanon. Attempting to collect bounty on animal which no bounty is authorized	25.00	Abbott, Joseph Franklin, R. D. No. 1, Marianna. Hunting without resident license	20.00
LUZERNE—\$35		Hinton, Walter Allan, 211 Poplar St., Washington. Hunting without resident license	20.00
Bonham, Emerson Robert, R. D. No. 1, Stillwater. Failure to tag furbearing animals	25.00	Longo, James, 81 Main St., Burgettstown. Dumping rubbish on State Game Lands	25.00
George, William Francis, 300 Packer St., Avoca. Dog chasing small game in close season	10.00	Macosko, George, Box 27, Van Voorhis. Training dog in close season	10.00
LYCOMING—\$20		Maryland, Roosevelt, 165 Wilson St., R. D. No. 5, Washington. Hunter injuring livestock	25.00
Miosi, Frank, 379 Lycoming St., Williamsport. Failure to display license tag while hunting	20.00	Mounts, Jesse V., R. D. No. 6, Washington. Dog chasing small game in close season	10.00
McKEAN—\$100		Sergakis, Gus, R. D. No. 2, Burgettstown. Training a dog in close season	10.00
Kilcoin, Gilbert Iven, Port Allegany. Possessing a beaver skin unlawfully taken	50.00	Stroud, Donald Max, R. D. No. 3, Burgettstown. Hunting groundhogs with an auto-loading shotgun; Hunting groundhogs with shotgun containing more than three shells	20.00
Yale, Zane Owen, R. D. No. 4, Smethport. Hunting while hunting rights have been denied; Possessing loaded rifle in vehicle standing along highway	50.00	Trembach, Joseph John, Box 391, Cokeburg. Releasing mink reared in captivity	25.00
MIFFLIN—\$90		Valentino, Jr., Charles, 1009 Fayette St., Washington. Possessing loaded rifle in vehicle, in motion along highway	25.00
Harbst, Paul Irvin, Reedsville, R. D. No. 1. Shooting within 150 yds. of occupied building; Killing two wild ducks in close season	45.00	WESTMORELAND—\$155	
Kline, Charles Edward, Reedsville, R. D. No. 1. Shooting within 150 yds. of occupied building; Killing two wild ducks in close season	45.00	Eicher, Jack Dewitt, Seward. Dog chasing small game in close season	10.00
MONROE—\$10		Karas, John Steven, R. D. No. 1, Export. Making false date in effort to collect bounty on one weasel	10.00
Dotey, Loren Alfred, R. D. No. 1, Stroudsburg. Attempting to kill woodchucks with an automatic firearm	10.00	Logan, James Jones, Jones Mills. Killing one wild turkey in close season	25.00
PIKE—\$10		Palmer, Ernest Edison, R. D. No. 1, Jeannette. Possessing parts of deer taken closed season	100.00
Axt, Philip L., R. D., Milford. Dog chasing game in close season	10.00	Shawley, Mrs. Daisy Ruth, Box 75, Jones Mills. False declaration of date on affidavit on a bounty claim	10.00
POTTER—\$305		YORK—\$60	
Bloom, Fred Arthur, P. O. Box 204, Coudersport. Dogs chasing small game in close season	10.00	Jennings, Archie Kyle, R. D. No. 3, Red Lion. Disturbing trap of another	25.00
Hosley, Fred David, R. D. No. 1, Coudersport. Possessing deer unlawfully taken	100.00	Roseman, Guy Benjamin, R. D. No. 1, Felton. Training dogs in close season	10.00
Mattison, Carl Rex, Galeton, R. D. Possessing one rabbit taken in close season	10.00	Runkle, Samuel Clinkson, R. D. No. 2, Felton. Shooting within 150 yds. of occupied building	25.00
Novisher, Florence Gertrude, Galeton, R. D. Possessing one rabbit taken in close season	10.00	NON-RESIDENT—\$60	
Rinehuls, Bannard Frederick, Keating Summit. Failure to display a license tag while hunting; Possessing a loaded rifle in a vehicle in motion along highway	50.00	Brown, Clarence, 741 Crouse St., Akron, Ohio. Hunting crows with shotgun containing more than 3 shells	10.00
		Taylor, Leon, P. O., Hobgod, N. Carolina. Hunting without non-resident license	50.00

GUN DOG ACTION—from Page 22

why we should hunt with a dog, and a fair sized book can be written about all the assets a hunting dog can provide.

If you are one who has delayed securing a gun dog, even at this late date you can procure one by driving to one or more of our advertised kennels in the state and selecting one all ready to go. Give a good dog a chance to show you how he can pay for himself a hundred times in additional pleasures in our great art of shotgunning.

These are the days to use a dog for your pleasure and his. Make sure he is hardened enough to stand all day hunts. Check his pads for cuts or bruises during the early hunts. Don't let him get away with serious faults, yet treat him kindly and give him an opportunity to show you where game is hidden. Feed him well, transport him, and house him comfortably while on trips and see a vet if he shows any signs of sickness. Handle him in an affectionate manner, rewarding him when performance is superlative. Don't rush him on point and do not shoot too many guns too close to him. Give him time in thick cover and avoid shouting and excessive whistling. Above all, be careful with your loaded gun and don't allow avoidable accidents to mar your life.

Days for dog action are here, so make every effort to spend all the time you can with your dog in the fields and woods and store up new memories that will live long after your gunning days are over.



Sam's Madison Jake, registered pointer dog owned by R. Otis Carpenter, Harrisburg.

3 FOR BIG GAME HUNTING

Possession of Leader of Party)

Captain
or Leader

[illegible]

(bine) hunting together for big game, or in any manner co-operating with each other for such hunting, to at all times be headquarters of the party, to be plainly visible for inspection from the outside by a Game Law enforcement officer. this required roster or record. ALL INFORMATION REQUIRED ON THE ROSTER MUST BE COMPLETED.—The

CAMP OR PARTY ROSTER

(This Copy To Be Kept In

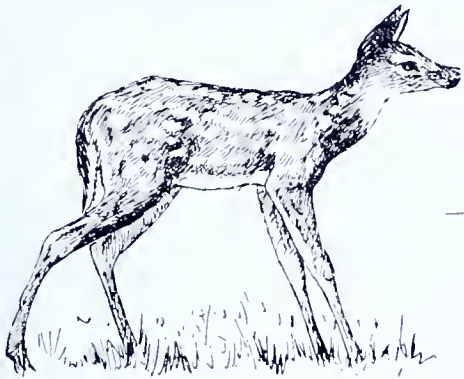
Name of
Camp or Party

Location: Permanent ☐ Temporary ☐ Located in Township

	Name	Address		Current Hunting License No.
		Street or R. F. D.—Post Office, State		
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IMPORTANT—The Game Law requires **FIVE OR MORE PERSONS** (including separate hunting parties who com
maintain this roster with the captain or leader of the party. In addition, a copy of the roster must be posted at t
Each member of the hunting party shall be liable to a penalty of \$25 for failure to maintain, post or produce

THE BELIEF THAT FAWNS GIVE OFF NO SCENT IS ERRONEOUS — DOGS, FOXES, ETC. HAVE NO DIFFICULTY SNIFFING OUT THEIR LOCATIONS.



THOUGH HE'S OUR MOST FAMOUS HIGH-JUMPER AND CAN CLEAR A 6 OR 7 FT. FENCE WITH EASE, AN UNHURRIED DEER USUALLY PREFERS CRAWLING UNDER AN OBSTACLE. HE'D RATHER SQUIRM UNDER A 4 FT. FENCE THAN HURDLE IT.



OUR WHITE-TAIL CAN BE DISTINGUISHED BY THE TAIL AND THE SMALL METATARSAL GLAND (a). THESE FEATURES ON BLACK-TAILS ARE SHOWN IN FIG. b, AND FIG. c SHOWS THE MULE DEER.

White-tail Facts

BY E. STANLEY SMITH



A DEER OF EITHER SEX LEAVES AN IMPRINT LIKE THIS ONE ON FAIRLY HARD GROUND OR LIGHT SNOW.



IN SOFT SOIL OR SEVERAL INCHES OF SNOW THE PRINT ON THE LEFT COULD HAVE BEEN MADE BY A BUCK OR A DOE.

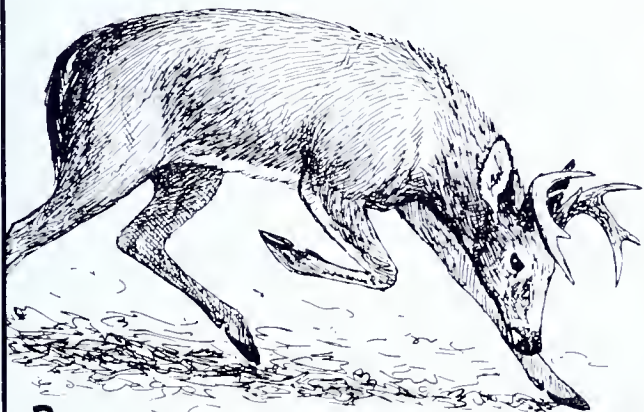


WHEN POURING ON THE STEAM, AS THIS DEER WAS DOING, BOTH BUCK & DOES LEAVE IMPRINTS OF THEIR DEW-CLAWS....

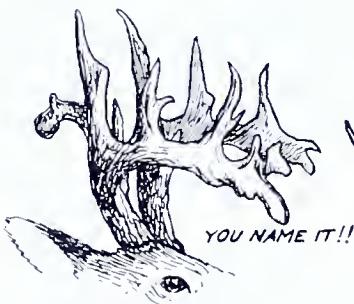
YOU'RE JUST KIDDING YOURSELF IF YOU THINK ALL TRACKS SHOWING DEW-CLAW MARKS WERE MADE BY BUCKS.. ALL DEER HAVE DEW-CLAWS, AND ALL LEAVE THEIR IMPRINT UNDER THE PROPER CONDITIONS.



DON'T BE MISLED BY THE POPULAR THEORY THAT A WOUNDED DEER ALWAYS SLAPS DOWN HIS TAIL, WHILE AN UNHURT ANIMAL INVARIABLY RAISES IT WHEN RUNNING AWAY. EXCEPTIONS ARE SUFFICIENTLY COMMON TO WARRANT A COMPLETE INVESTIGATION AFTER SHOOTING AT A DEER, REGARDLESS OF THE POSITION OF HIS FLAG..



DURING THE MATING SEASON AMOROUS BUCKS LOSE ALL THEIR CUSTOMARY WARINESS AND FOLLOW THE TRAIL OF DESIRABLE DOES SO INTENTLY THAT OLD-TIME HUNTERS OFTEN KILLED 4 OR 5 BUCKS SEVERAL MINUTES APART BY WAITING ON THE TRACK OF A DOE.



YOU NAME IT!!



A RARE 3-HORNED BUCK



"DON'T SHOOT!!"
A FREAK SPIKE-HORN.



PALMATED ANTLERS —
A "SHOVEL BUCK".



HIGH AND NARROW

WHITE-TAIL ANTLERS COME IN A VARIETY OF SHAPES & SIZES. ABOVE ARE A FEW.

Pennsylvania Upland Hunting Calendar

SEE HUNTING LICENSE FOR BAG LIMITS, HUNTING HOURS & SPECIAL REGULATIONS

NOVEMBER 1949

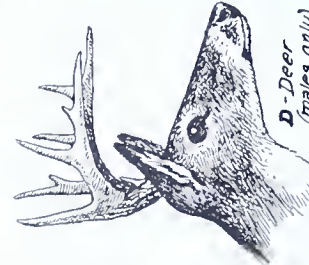
SUN	MON	TUES	WED	THUR	FRI	SAT
 OBEY THE LAWS	 SAVE LIVES	No 1 Before Hunting 9 a.m. CGHNTOPQRSX	CGHNTOPQRSX	CGHNTOPQRSX	CHNTOPQRSX	CHNTOPQRSX
6 Trapping Only	7 CHNTOPQRSX	8 CHNTOPQRSX	9 CHNTOPQRSX	10 CGHLMNTOPQRSWX	11 CGHLMNTOPQRSWX	12 CGHLMNTOPQRSWX
13 Trapping Only	14 BLMNTOPRSWX	15 BLMNTOPRSWX	16 BLMNTOPRSWX	17 BLMNTOPRSWX	18 BLMNTOPRSWX	19 BLMNTOPRSWX
20 Trapping Only	21 LMNTOPRSWX	22 LMNTOPRSWX	23 LMNTOPRSWX	24 LMNTOPRSWX	25 LMNTOPRSWX	26 LMNTOPRSWX
27 Trapping Only	28 DLMNOWX	29 DLMNOWX	30 DLMNOWX	PREVENT ACCIDENTS	HUNT SAFELY	RESPECT PRIVATE PROPERTY



B-Bear



C-Coon, hunting only



D-Deer (males only)



G-Ruffed Grouse



H-Hungarian Partridge



L-Skunk



M-Mink

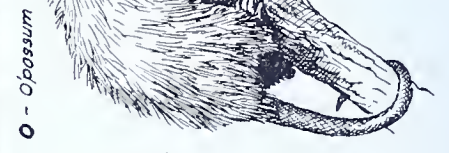


N-Red Squirrel

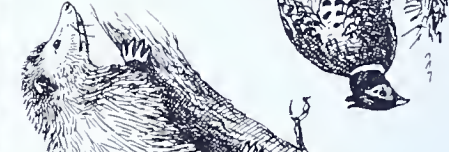


T-Wild Turkeys, all counties except - Adams, Bradford, Cambria south of Conemaugh R., Carbon, Clarion, Columbia, Cumberland south of U.S. Highway #11 to Susquehanna R., Fayette, Forest, Franklin south of U.S. Highway #11, Greene, Lackawanna, Luzerne, Monroe, Northampton, Pike, Schuylkill, Somerset north of Pennsylvania Turnpike, Susquehanna, Venango, Warren, Wayne, Westmoreland, Wyoming and York.

O-Wild Turkeys, all counties except the above and Cameron, Clearfield, Clinton, Elk, Jefferson, Lycoming, McKean, Potter, Snyder, Sullivan, Tioga, and Union.



O-Opossum



Q-Quail, Bobwhite



S-Squirrel, -Gray, -Black & Fox



C-Coon, hunting & trapping



W-Otter



X-Grackle



R-Rabbit, Cottontail



P-Pheasant, Ringneck (males only)

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DECEMBER 1949

TEN CENTS

The GAME NEWS

WILLARD T. JOHNS, JR.
Editor

PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR

★

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*Stumped
again?*

??

Yup, I know this Christmas Gift situation is a tough nut to crack, but how does this sound? How about giving Brother John or Uncle George a subscription to the Game News? That's a swell way to bring hunting stories and information right into his home twelve times a year!



Enclosed find ☐ check
money order for \$..... for which please enter
subscription to the PENNSYLVANIA GAME NEWS for years

Name
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PENNSYLVANIA
MINK

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DIARY OF A SMALL GAME
HUNTER

By R. L. Rineard

CHRISTMAS WISHES FOR WILDLIFE

Inside our warm homes this month, the old familiar scenes of the Christmas season will unfold once more. From some snowy hillside will come a young fir or balsam to be trimmed with all the beauty artificiality can bring. Beneath its fragrant green bows gay packages and bright ribbon will form a carpet of joy and expectancy. The spirit of giving will dominate all other human emotions while young hearts will bear great hope that "Santa Claus will soon be here."

It will be a time for remembering old friends, for greetings and resolutions, for toasting the pleasures of the old year, and for saluting the hopes of the New Year—"Merry" and "Happy" and "Should auld acquaintance be forgot" . . .

Beyond the tinsel, the bright lights, and the yuletide glow—little remembered and almost forgotten—will be the wild birds and animals that so recently gave so much pleasure to more than a million Pennsylvanians. The pheasants huddled beneath some lonely fence-row on Christmas Eve, the deer bedded down in some snow-covered pine thicket, the rabbit shivering in some icy cornfield—all these friends are too busy fighting for existence to take part in any holiday.

But in the hearts of men who care, these Christmas wishes might be made for them . . .

For Cottontail, the rabbit—bundle of soft brown fur and big game of the small boy—a Christmas wish for good weather during next spring's breeding season and careful drivers on the highways of our State, drivers who will give the bunny a "brake."

For Ole Ruff, the grouse, a Christmas wish that wildlife research will someday soon find the cause of his cyclic mysteries and find the way to give him a chance to stay on "high" forever.

For Ringneck, the pheasant, a Christmas wish for "nesting islands"—for the chance to rear young in safety on fields of alfalfa and hay.

For Whitetail, the deer, a chance to live and die nobly at the end of the chase, a Christmas hope that he won't pass on to the eternal refuge through long and bitter starvation.

For Old Tom, the wild turkey, a Christmas wish for a continued comeback. May he find increased food and cover during 1950 and may Penn's Woods retain forever his wild, bronzed beauty.

For Bruin, the black bear, a Christmas wish for an increased supply of nuts and berries. And for his cubs, a wish for complete protection so that bear hunting in the future can always be real sport instead of wanton slaughter.

And for all of nature's children, our wildlife, a Christmas wish for increased cooperation among our sportsmen, landowners, farmers, and conservation agencies to bring them more food and cover, better protection, and a chance to live in a Happy New Year.

COVER

Whitetail Deer

by

Jacob Bates Abbott



PROGRESS WITH A TRIBUTE TO MOTHER NATURE ★

By TOM FRYE

“ACTIONS speak louder than words.” This simple truth is the foundation of my talk which will be limited to words necessary to paint a highlight picture of what your Game Commission has been doing and some things it has planned for the benefit of our wildlife, the sportsmen and the landowners of the Keystone State.

In this beautiful Forum, on February 12 of this year, I spoke to you about the responsibility of organized sportsmen and appealed to you to accept your responsibilities and to transform them into action so the sportsmen, and we of the Game Commission, working together, can do the job that must be done if we are to be successful. At that time a suggested eleven-point program of improvement was spelled out for your consideration. If there were objections to that program or any part of it, they haven't been voiced so as to bring them to our attention. On the other hand, many individuals have expressed their approval and many letters endorsing the entire program have been received. To us, who are responsible for formulating and administering such programs, each of the eleven points was needed and each was plain, common sense. We thought you would recognize the progressiveness of the program and it is apparent you did just that.

Eight months later, let's look at the record and see what progress has been made. Many times I have said “We have nothing to be ashamed of or to hide but much to which we can point with both pride and satisfaction.” Nobody will ever hear me say that we are perfect. Perfection is never attained but it is the goal toward which we constantly strive. We are confident, however, that we are on the right track, traveling in the right direction and getting many fine things accomplished. So let's look at each point of the program as suggested last February and see what has happened:

1. “Reorganize Our Operations to Give Better Service and Results at Less Cost Wherever Practicable.”

The September issue of the GAME NEWS carried the picture and the story of a complete reorganization which became effective June 1, 1949, the beginning of the State's new fiscal year. Our executive, administrative and operating organizations have been completely streamlined with one objective—“better service and results at less cost.” Considerable time and effort were put into that streamlining job and today we thank Governor Duff and his Executive Board for officially placing the stamp of approval on an organizational structure with a foundation of sufficient strength to carry an anticipated heavier burden as the years go by. It fits our needs today and should be adequate for many years to come. However, as we need to improve from time to time to meet the ever-changing needs, there will be no hesitancy on our part to effect whatever is needed. So point No. 1 of the program has been completed and we are confident that we have a strong and effective organizational structure operated by competent, faithful and loyal personnel.

2. “Provide a Full-Time Game Protector in Each of the 150 Districts.”

Today, as a result of the graduation of the Fifth Student Class at The Ross Leffler School of Conservation on May

27, 1949, there are 143 game protectors assigned to the 150 districts. If it had not been for retirements, withdrawals and promotions since last May, each of the 150 districts would have a full-time, full-fledged game protector today. After the next student class, which should graduate early in 1951, we should have a full complement of 150 game protectors. While we have not completely reached our goal, we have progressed very favorably, and we have strengthened our lines.

3. “Increase the Compensation of Our Game Protectors and Others Who Are Underpaid.”

We are extremely gratified to announce the adoption of a fair, just, equitable and long-deserved salary adjustment for the field employes of the Commission, effective and retroactive to August 1, 1949. The new pay schedule places our enrolled field service and game farm employes on a basis that is fair, reasonable and comparable with salaries paid to other employes of the Commonwealth. Our employes deserved this recognition for a long time and we thank all who played any part in its adoption including the Federation for its endorsement. Other salary changes necessary to effect a complete adjustment are being made as fast as practicable. So we are well “over the top” toward this objective and progressing slowly, but entirely satisfactorily.

4. “Provide a Reasonably Adequate Disability and Pension System for Game Protectors and Other Employes.”

On this fourth point we were heartened by the action of the 1949 Legislature which approved a bill providing for a reasonably adequate pension and disability system but we were keenly disappointed when it was vetoed by the Governor. It was vetoed with the idea of studying the needs and reporting them to the next Session of the Legislature. We are still optimistic concerning favorable consideration by the next Session and hopeful that the Governor will approve a bill that will provide an adequate pension and disability system for our law enforcement employes.

We believe the hazards of our type of law enforcement justify much more protection than is now afforded.

5. “Provide Additional Deputy Game Protectors to Assist in the Enforcement of Game Laws.”

The Commission has approved the appointment of 3,000 qualified deputy game protectors. That's a pretty good sign that it means to enforce the laws. An aggressive recruiting campaign has been under way for several months with the result that our deputy force has been substantially augmented. While our long-range objective of law enforcement is to gain respect for the law, it is evident that we must instill the fear of the law through strict enforcement until that finer objective can be reached through understanding and education.

6. “Provide In-Service Training to Our Game Protectors and as Many Deputies as Possible.”

Every game protector in Pennsylvania and some deputy game protectors received one week of intensive in-service

(Continued on Page 24)



A GREAT majority of Pennsylvania's half million deer hunters are members of camps located close to the home of the wary white-tails. Unwilling to sacrifice the companionship and good fellowship of camp life for the alternative of using a year round home as a base of operations, these men find in deer camps the true pleasures of the hunt.

Scattered throughout the northern tier counties are thousands of these temporary homes for sportsmen. Some are beautiful, all-weather cabins complete with modern conveniences ranging from running water to electricity. Others are little more than shacks or sheds with even a good number of tents pitched in for good measure. All deer camps, however, are just as warm and comfortable as men can make them—furnished with second hand furniture and entirely adequate for the short time they are in use. Here are gathered groups ranging in

size from two or three to ten or even thirty and in age from six to sixty during the two weeks of deer season each year. Some members of the party may only meet once each year, others may be next door neighbors, but in them all, old and young, lies an inborn desire to find their pleasures in the great outdoors and to match their wits against the wild skill of the most noble game animal of them all.

In order to bring to readers of the "GAME NEWS" an accurate picture of what goes on in a typical big-game camp, Hal H. Harrison was assigned to cover the opening day of the 1948 season, pictorially, at a typical camp—Harry Depp's cabin in Rich Valley, Cameron County, five miles north of Emporium. During the deer season, Depp, an automobile salesman whose home is in Crafton, near Pittsburgh, shares his camp with old comrades who split the expenses and join together for the hunt.



Frank Mathias admires the head of his 7-point buck.



Principal indoor sport in all hunting camps is cards. Pinochle and poker are the two favorites.



In front of the fireplace, Charley Gerlach, pipe in mouth, spins some hunting yarns for Walter Krok, left, and Manny Rahner.



Camp owner and chief cook, Harry Depp, fries fresh deer livers for supper after the first day's hunt.



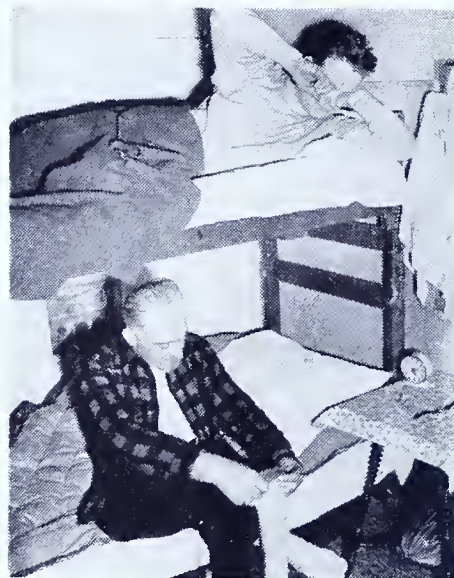
Hunters at Camp Depp pitched into the first night's meal . . . fried deer livers and vegetable-beef soup (gallons of it).



Manny Rahner is first to take his rifle from the gun rack for the opening day.



Brady Munsell dresses Frank Mathias's buck as Frank holds the front legs and John Nugent, also a successful hunter, looks on.



Above: Charley Gerlach is nearly dressed while Walter Krok still rubs sleep from his eyes shortly after 5 a. m. on opening day.

Left: Harry Depp posts the official roster . . . a legal act required in every hunting camp.

Registered officially at the camp, in addition to Depp, were: Sam H. Cole, Frank J. Mathias, Charles R. Gerlach, Walter J. Krok, and John Nugent, all of Carnegie; E. H. Rahner, R. D. #5, Pittsburgh; Harry Munsell, Ridgway; and Dick Hickoff, Emporium.

Two deer were bagged on opening day. John

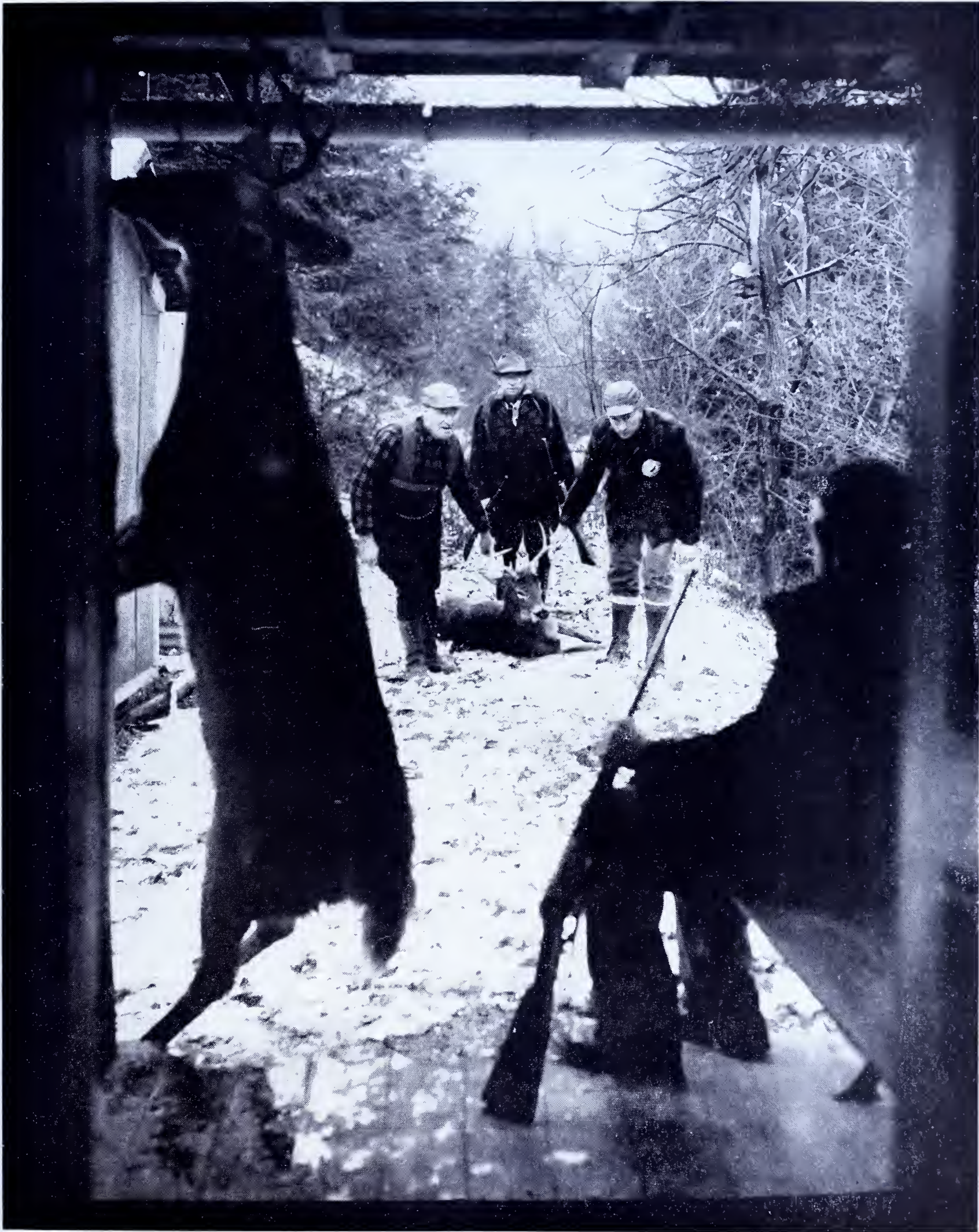
Nugent and Frank Mathias, both old timers at deer hunting, came near tying each other in every way. Both bagged their bucks at approximately 10 a. m., both prizes sported seven points on their antlers, and both were about the same weight. And, to top it off, both were shot within one-quarter mile of camp.



Camp owner Harry Depp checks the ropes holding the first day's kill of two seven-point bucks.



The camp roster complete, front row, left to right: John Nugent, Carnegie; Harry Depp, Crafton; Harry Munsell, Ridgway; Sam Cole, Carnegie; back row, left to right: Walter Krok, Carnegie; Frank Mathias, Carnegie; Dick Hickoff, Emporium; E. H. Rahner, R. D. 5, Pittsburgh, and Charles R. Gerlach, Carnegie.



Charley Gerlach, left, and Sam Cole, right, give Frank Mathias, rear, a lift in dragging his deer. John Nugent, with his deer hanging, awaits their arrival in camp.

DEEP IN THE WINTER WOODS

BY BILL WOLF

YOU ARE sitting in a warm room—I hope!—comfortably listening to the radio. Outside, the winds may whine around the house, or there may be that chill silence of a really cold night. This is winter.

The same wind that rattles your windows these days sweeps through the woods and across the fields. It pokes cold and inquisitive fingers down groundhog holes that are not covered with drifted snow. It pries into hollow trees. It rushes across frozen ponds and glances off beaver and muskrat houses. Or else the long, still nights are silent except for the startling crackle of trees freezing under extreme cold, or the rumble of ice expanding suddenly on lakes and streams. This is the worst period of the year for Pennsylvania's wildlife, which has the same basic winter problems *you* have: Keeping warm and getting food.

Let's look in on some of these creatures and see how they are making out in their extremely air-conditioned winter homes. Some of the facts about their cold weather lives might surprise you. For example, this surely would seem to be the wrong time of the year to bring forth young; but cubs of the black bear are born in this, the coldest time of the year.

There is some doubt whether the mother bear is even aware of the blessed event, because she sleeps away most of these nights and days. Bears are not true hibernators, according to some naturalists; but they certainly get drowsy in winter and may sleep for a couple of months at a time. For this nap, they pick a hollow tree, a stump, an overhanging rock or they may even dig a den. The females especially pick out a snug retreat as a rule, and there they give birth to one to four cubs in January or early February.

It may seem like one of the cruelties of nature that bear cubs should be born in midwinter, blind, nearly naked and all but helpless. However, they don't seem to mind it. Within a month they can see, and start crawling over and around their half-unconscious mother who apparently pays little attention to them until fully awake in March.

Pennsylvania Game Commission representatives have been lucky enough several times to get excellent motion pictures of such bear families in their winter quarters. On one occasion, John J. Slautterback photographed two cubs, each a little larger than a guinea pig, having lunch. On another occasion, Leo A. Luttringer photographed a female and her three cubs which were holed up in an old pine stump in Potter County. The mother, in a very tired sort of a way, showed some resentment of the intrusion; but lacked ambition enough to do anything about it. In a third case, Robert T. Leiter took motion pictures of a mother and her single cub near Lock Haven in Clinton County. This female had denned up in a slight depression beneath some upturned

tree roots. Some time before the den had been discovered, she had crushed the skull of a mongrel dog that had become too inquisitive, indicating that she at least opened one eye long enough to defend herself and her young from danger.

There's no steam heating and there are no warm rugs where bears give birth to their young at this time of the year. But the young, which nestle close to the hairy and warm body of the mother, will survive without too much discomfort and repopulate the forests with these lumbering black animals.

Equally hidden, but not so inactive, is the home life of the beavers and muskrats during this midwinter period. These animals do not hibernate. Instead, they live quite snug and secure in houses or burrows which they have had foresight enough to build. They figuratively sit back in a comfortable chair, with their feet cocked, picking their teeth after a pleasant meal during these winter months.

Not all beavers build houses, by any means. Some live rather solitary lives in burrows, dug into stream banks. Houses usually are associated with beavers that live in natural lakes or ponds which they have created by constructing dams. Early this winter I walked along a tributary to the Loyalsock Creek in a wild part of Sullivan County. We walked through an old beaver dam flat where the animals once had flooded a couple of acres and then disappeared. There, much to our surprise, we found evidence of at least one beaver returned to the site. There were fresh cuttings and poplar sticks peeled clean of the food-giving bark, and under the roots of a tree, right in the stream bank, we found the entrance to a burrow. There was no evidence that this beaver, or beavers, intended to restore the old dam.

Such burrows usually have entrances well below the ice line, and sometimes may extend forty feet and are wide enough for a man to crawl through them. At the terminal end of such burrows are quite comfortable dens or nests. Here the beaver relaxes completely in winter, leaving its figurative hearth only when it wants to reach some of the sticks upon which it depends for food, and which it had stored on the stream bottom, weighted down if necessary with stones or mud.

The lodges, which are far more noticeable and elaborate, are built of sticks, sod, stones and mud. They are built on the bottom of ponds in water from four to even seven feet deep, and may be as much as forty feet across at the foundation and fifteen feet high, projecting above the surface, of course. The beavers live in the upper story, and have entrances below the ice line. Their apartments, and that's just what they resemble, are always clean and lined with chewed wood or dry grass. One entrance leads to the food cache, from which underwater source they drag sticks into the lodge. The walls freeze solid in cold weather, creating a natural fortress in which the beavers are safe from all natural predators. There they live, wrapped in their own warm fur coats which many a woman envies, until spring thaws the pond and walls of the house.

Muskrats resemble beavers greatly, both in habits and habitat, although they are more closely related to the tiny meadow mice so plentiful in the same marshy lowlands that muskrats prefer. Like beavers, they live in stream bank burrows, or in conical lodges built in ponds or marshes. Both burrows and lodges have entrances beneath the ice line, and contain nests in which the muskrats can laugh at winter and the high cost of fuel. Their lodges are built of roots and stems of plants, mixed with mud, and the living chamber is well above waterline. Since the plants used in building usually are those eaten by muskrats, they can consume part of their house if food gets scarce over winter.

If you should take a walk along a stream which has been kept clear of too heavy an ice covering, you probably will find the tracks of muskrats in the snow on the banks. They make short excursions from their burrows in winter, either in search of more food or just for the exercise.

The meadow mice and the several other kinds of mice that inhabit the woods and fields lead rather obscure lives at all times, and especially so in winter. When the snow is not too deep, their tracks can be seen around weeds from which they eat the seeds; but when the heavy snows come they either retire to their nests or travel along tunnels under the snow.

We had an interesting experience with a mouse last deer season. By prearrangement, our party met at noon each day beside a large boulder where we built a fire and had





E. Stanley Smith

lunch together. At the base of the boulder, an inquisitive mouse stuck his nose out of his burrow the first day, and reappeared there every day for a week. Since we saw only his nose, whiskers, eyes and ears, we couldn't identify it, and probably wouldn't have even attempted identification if he had shown his entire body. Like most persons, we didn't know much about our native mice.

From the first day on, we put scraps of leftover food around the hole, and he would eat at those he could reach without exposing himself. By the end of the week, there was a small mound of cookies, pieces of bread, bits of cheese and meat—and each new day there was evidence that he had helped himself liberally during the preceding night. That undoubtedly was the best fed mouse in Monroe County, and we have wondered since whether he ever got indigestion, and whether he was able to add much of the food outside to his winter store below the earth's surface.

The eastern flying squirrel curls up in some hollow tree and tries to ignore the winds that howl outside. The active red

squirrel lives on his larder of stored food and ventures abroad whenever the snows aren't too deep. The gray squirrel will spend long periods of bad weather in its winter nest, and then will come down from the tree to hunt for nuts which it hid here and there on the ground.

Deep below the frozen earth, the groundhog sleeps in the nest chamber of its burrow. It has solved winter's problems better than you and I have. Its heart almost stops beating. Its breathing is scarcely evident. Its body temperature drops. It is immune to any cold because it isn't aware of it. It has no clothing bills, no fuel bills, no food bills. It just yawns over winter, lying in a comatose state until a warm day comes along when it may condescend to stir a bit and come up to look over the world of snow and ice. Then, if conditions displease it, the woodchuck will return to its deep sleep. This occasional emergence from the den in winter has given rise to our legend of Groundhog Day, February 2.

The groundhog digs its own home, but the common skunk, which is another hiber-

nator, isn't so ambitious. It will den up in any old burrow it finds, in a hollow log or in a heap of stones. There it will sleep away the coldest months of the year.

The temperature of caves is uniformly mild, even in the coldest winters, and there those species of our native bats which do not migrate south hibernate. Bats go into hibernation early because they live entirely upon insects and have little food available after the first frosts—so they go to sleep. It is an interesting and curious sight to see them in caves, hanging upside down from the stone walls, singly or in clusters. The big and little brown bats, the pygmy bats and a few others inhabit our caves, and you would be surprised to see how comfortable caves can be in winter. There are seldom any drafts, many caves are remarkably dry and not the damp things most persons suppose them to be, and the temperature remains in the fifties. Considering their advantages, caves furnish winter shelter to surprisingly few other animals, and they

(Continued on Page 32)



PENNSYLVANIA BIRDLIFE



OUTDOOR KIDS

By HAL H. HARRISON

"GEE, BILLY, aren't these new books wonderful?" "I'll say they are, Jane, and just look at the swell pictures in this one, 'Let's Go Outdoors,' by Harriet Huntington."

"Gosh, mom and pop sure know the kind of books we like, don't they? Have you looked at 'Traveling with the Birds' yet?"

It was Christmas morning in the home of the Outdoor Kids. They had eaten a quick breakfast against their wishes but at mother's orders. Now they were back in the living room sitting under their tree. Pal had been brought in from his warm barrel and decorated with a big red ribbon, much to Pal's disgust.

The setter had tried to remove the neck adornment, but had finally given up and was now stretched out contentedly near the children.

Billy picked up another book from the pile beneath the tree.

"Oh, Jane, here is a book that we can use all of the time. It is 'Pennsylvania Birdlife' and it is published by the Pennsylvania Game Commission for people who want to know about our own state birds."

"We have that one in school," Jane replied, "and my teacher uses it in our classroom work. It tells about how valuable birds are, how to study birds, how to attract them and there is a chapter of interesting things about birds too."

"Say these color pictures in the center sure will help us to name most any bird we see, won't they? There are two pages on summer birds, one on winter birds, game birds, owls and birds of prey. Must be 'way over a hundred color pictures, eh Jane?" Said Billy.

"Here's a book that we both asked for, Billy. It's 'Vulpes, the Red Fox.' That is the book that Mr. Netting at the Carnegie Museum said was such a grand story. Look what it says about it here on the back cover, 'Any youngster 12 to 90, who loves the out-of-doors, will enjoy this fine book.' And here's another, 'The authors have created a character worthy of a place among the memorable heroes of animal literature.' I'm certainly going to read this one first," Jane added.

"I think I'll read this one on 'Friendly Animals' first," Billy declared. "Or maybe I should read this one, 'What Bird Is It?' It asks a lot of questions about birds, like this: 'What bird eats ants?' Do you know the answer to that one, Jane?"

"Sure, that's easy. It's the flicker," Jane replied.

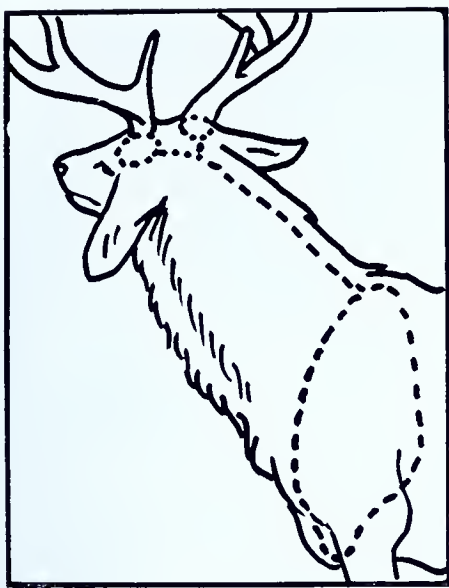
"Ok, smarty. Here's a book that tells a lot of things you *don't* know," Billy answered, handing Jane a copy of George F. Mason's "Animal Sounds."

(Continued on Page 14)

USE YOUR DEER HIDES!

By S. K. WILLIAMS

President, Clearfield Furs



INSTRUCTIONS IN PREPARATION OF HEADS FOR MOUNTING

If possible, leave head attached to skin, salt heavily to prevent decay, and ship immediately to your taxidermist. If you cannot ship at once, or if shipping will take some time, use the following instructions.

Make opening cuts as indicated on the diagram. Cut scalp plenty long with part of shoulder and brisket. Always cut open on back of neck. Never cut the throat, as it will show when mounted. Cut off ears close to the skull, and cut meat away at the base.

Peel around horns and go down the skull; be careful not to cut holes, especially around eyes and lips.

Remove all flesh and fat, salt well, roll up for a few hours, then turn scalp flesh side out, re-salt, stretch and dry in shade. Do not let skins dry in folds, as hair will slip. Fine dairy or table salt is best. Ship when dry.

YOUR deer hides are a source of valuable material, seldom available in retail stores, for gloves, jackets, vests, etc.

Considering the very limited amount of domestic buckskin these extremely desirable items of apparel bring fancy prices when it is possible to buy them. But, where a sportsman can secure his own raw skins or those of his sportsmen friends, he can have the skins tanned and made into useful, beautiful and highly practical articles at reasonable cost.

Usually one deer skin will make three to four pairs of gloves and two to four skins will make a jacket, depending on the size and condition of the skins and the size of the garment needed.

Skins of both buck and doe are suitable for gloves and jackets, although some fawn skins are too thin to provide sufficient weight leather. It is the general practice of taxidermists or tanners not to charge for skins that do not tan satisfactorily.

As most deer skins are tanned with the grain on, sportsmen should be careful not to drag their deer on bare ground or in other ways rub the hair off as this usually damages the grain of the skin and shows up when tanned to leather.

If you are having your deer head mounted it is best to leave the head and hide attached and let your taxidermist cut the head off at the proper place to have sufficient neck skin for your mounting. The balance of the hide can be tanned. If you are not having the head mounted then cut the head off back of the ears and you will have more skin for leather. Do not cut the front of neck on a deer head for mounting. If you must cut open the neck to skin the deer, cut up the back of neck from a point at base of neck in a straight cut up to between the ears.

All deer should be skinned out as soon as possible after killing. You will have better venison; you will be able to get the head and skin to your taxidermist in good condition; and your taxidermist will be able to give you better work.

It may not be necessary to salt; but the safest way is to salt the hide heavily and get it off to your taxidermist or tanner promptly . . . the same day the deer is skinned if possible. It requires about two to three pounds of table salt to properly salt a deer skin. Rub it in well on the flesh side, roll up the skin and ship or deliver to your taxidermist at once.

Thousands of fine specimens are allowed to spoil each year by delay in getting them into

skilled hands promptly. Don't expect to get good results if you give your taxidermist half spoiled skins.

Most taxidermists and tanners in Pennsylvania can show you many styles of jackets or gloves, from which to select, as well as colors available for tanning your deer hide. The most popular colors in deerskin are Saddle Tan and Chocolate Brown, both of which are very suitable for men's and women's gloves and jackets.

No other finished leather has the fine, soft feel of deerskin. It's durable and rugged quality will give you extra years of service at moderate cost. Truly, a fine way to commemorate a fine sport.



Mounted heads such as these require careful handling on the part of the hunter as well as careful preparation by a good taxidermist.



WINTER FOOD OF PENNSYLVANIA MINK

By JOHN E. GUILDAY*

THE DIGESTIVE tracts of 155 mink were collected during the months of November-December 1947, January and December 1948 in Somerset, Fayette and Greene Counties in southwestern Pennsylvania. Credit is due the many trappers who made this study possible by saving the digestive tracts of the animals they trapped. The collection and analyses of this material was done as a part of the work of Pittman-Robertson Project 24-R, Survey of Pennsylvania Mammals (southwest sector).

Of the 155 digestive tracts examined, 50 contained no evidence of food in either the stomach or intestines; 69 had no food in the stomach but did have food in the intestines. The high percentage (71%) of mink with empty stomachs seems to indicate that the mink most likely to be caught are those most actively hunting for food.

Table 1 is based upon the frequency of occurrence of the various food items in the digestive tracts. Volume is disregarded. If a food item occurred in one digestive tract (stomach plus intestines) this was given the value of one, regardless of the volume or the number of the individual animals represented in one digestive tract. For example, crayfish were found in 18 of the tracts, fish in 25, mice in 35, etc. These occurrences were then tallied to get the total number of occurrences and the percentages representing the occurrence of each individual food item were worked out. These are presented in Table 1.

*Part-time assistant, Pittman-Robertson Project 24-R.

Table 1.

Frequency of occurrence of food items in 105 mink digestive tracts, taken in Nov., Dec., Jan. 1947-1948—in southwestern Pennsylvania.

Species	Occur- rences	Per- centage	
1. Mouse sp. (Microtinae)	12	9.37	
2. Deer Mouse (Peromyscus sp.)	9	7.03	
3. Mouse sp.	8	6.25	
4. Rabbit (Sylvilagus sp.)	8	6.25	
5. Meadow Mouse (Microtus pennsyl- vanicus)	5	3.90	
6. Norway Rat (Rattus norvegicus) ...	3	2.34	MAMMALS
7. Short-tailed Shrew (Blarina brevi- cauda)	2	1.56	41.38%
8. Grey Squirrel (Sciurus carolinensis)	2	1.56	
9. Jumping Mouse sp. (Zapodidae) ...	1	.78	
10. Shrew sp. (Soricidae)	1	.78	
11. Flying Squirrel (Glaucomys volans)	1	.78	
12. Muskrat (Ondatra zibethica)	1	.78	
13. Birds sp.	3	2.34	BIRDS
14. Song Sparrow (Melospiza melodea)	1	.78	3.12%
15. Fish sp.	22	17.20	
16. Sucker (Catostomus sp.)	1	.78	FISH
17. Chub (Semotilus sp.)	1	.78	19.54%
18. Shiner (Notropus cornutus)	1	.78	
19. Salamander sp.	1	.78	AMPHIBIAN .78%
20. Crayfish (Cambarus sp.)	18	14.06	
21. Insects sp.	12	9.37	INVERTEBRATES
22. Spiders sp.	11	8.60	32.03%
23. Deer (Odocoileus virginianus)	2	1.56	CARRION
24. Unidentified large carnivore	1	.78	3.12%
25. Mink (Mustela vison)	1	.78	
	128	99.97	



DIARY OF A SMALL GAME HUNTER

By ROBERT L. RINEARD

(CONTINUED FROM LAST MONTH)

Thursday, November 11—Temperature at 7:30 was 32°. Sky clear and little wind. Breakfast consisted of fruit juice, hot cereal, pancakes, bacon and eggs, and tea. After breakfast I headed for the ridge behind camp, but two hours went by without any luck. Since I was not seeing any game and the weather was turning very warm, I could not resist the call of the stream.

Hurrying back to camp, I opened my box of tackle and reaching in, came up with an old fishing reel. Removing the line and picking up a hook or two, I went outside and dug a few worms.

Cutting a box full of wood and leaving it to dry in the warm sun, I picked up my gun and a stick which would serve as a rod. The first pool I stopped at contained several fallfish and some suckers. After several futile attempts, I finally managed to get the bait in the water.

Before long a vigorous strike followed and I hooked and landed a fallfish about seven or eight inches long. Although I had been out of meat all week, I decided it was too small and let it go. There is one advantage the fisherman has over the hunter. If he takes a fish that is too small or illegal, he can promptly release it with proper care and the fish will survive.

This is not true of game that is shot. Once it is shot it is either dead or hopelessly crippled, soon to die. Too often the hunter does not look carefully before shooting. Sometimes he kills unlawfully by accident. He can, if he is a sportsman, report

his mistake. This will save him a lot of money, honor, and give him a clean record. However, there are some hunters in the woods who have no code of ethics or conscience.

Moving downstream to a better spot, I set up my rod on an old stump. Walking to the other side of the stream, I was surprised to see my line running out. The exhibition of rock jumping and involuntary wading which followed, as I made for the opposite shore, was something to see. No need to tell you that when I arrived the hook was bare.

Having enough of improvised fishing and uncooperative fish, I headed back to camp. It was 60° again and the darn wasps were thicker than flies. Luckily, I plugged up most of the crevices around the windows but it was still amazing how many got thru. The floor was constantly covered with dead wasps, as I killed as many as possible, as often as possible.

Leaving the camp in order, except for some dirty dishes, I started up the valley after bushytails. It was two hours before I sighted the first squirrel and then did not get a shot. They seemed to be gun shy, and I cannot say that I blame them. For, if you had to look at as many guns a day, and dodge so much shot, you would be more than shy, brother . . . you would be annihilated. It is miraculous how the game can survive under the tremendous pressure.

About dark I got two shots and one squirrel which was the first meat I had since the previous Saturday. Upon reaching the road I met a lumber truck and got a ride into camp.

Friday, November 12—Cool and partly cloudy this morning. Spent day working in camp. Cleaned out back room and washed windows. The windows had not been washed for many years and the light fairly blazed in when I had finished. About 3 o'clock I put potatoes and corn in the oven to bake. Then I went back of the camp and felled a large dead locust for fire wood.

At 4 o'clock I put down my axe and cross-cut, took up my shotgun, and made off for the tall timber. The woods were becoming quiet and, as darkness approached, the squirrels came out to feed. The next half hour I saw three squirrels and bagged two, both being large males. Once again I had some meat in reserve. In a short time it would be dark so I started in slowly, hoping to see a turkey.

Supper consisted of two mistakes this evening. The corn was over done and the potatoes were not done. Making the best of the worst I soon had enough to eat and was in the process of cleaning my game when a familiar voice from outside called, "Hey, is Daniel Boone in there?" It was my best friends, the Dodson brothers, Bill and Charles, from Harrisburg, two of the finest sportsmen a fellow could gun with.

(Continued on Page 27)

STATE GAME LANDS NO. 188--SNYDER COUNTY

By JOHN S. SHULER

Conservation Education Asst.—“C”

SNYDER COUNTY, named after the third Governor of Pennsylvania the Honorable Simon Snyder, is located near the central part of our Commonwealth. It first became a political sub-division on March 2, 1855 when it was formed from a part of Union County. It is the fifth smallest county in the State, having an area of about 320 square miles. Being quadrangular in shape, it is approximately 28 miles long and 18 miles wide. It is said that when the surveyors were running the county line in the Richfield area they were attracted to a distillery, so run their line to it. Evidently after they had satisfied their thirst, they ran the line back again to Mahantango Creek where it should have gone in the first place. This gave Snyder County a geographical protrusion into Juniata County.

By the very nature of the county's terrain, farming has always been the chief occupation of its people. This is more clearly evident when one looks at its population classification. Of its 20,000 people more than 17,000 are classed as rural inhabitants.

It was one of these farms, from the Ritter tract, that formed the basis for the first purchase in 1941 of STATE GAME LANDS in Snyder County. Designated as State Game Lands No. 188, the area is located in Adam and Beaver Townships about one and one-half miles North of Beavertown, midway between Shade and Jacks Mountain. Its 1132 acres are mostly hilly. All tillable land had been retired from cultivation at time of purchase while other acres were covered with a volunteer growth of pitch pine.

The first work done on these lands was the sharecropping of twelve acres. This proved very satisfactory and is still being carried on. Another early project was the planting of Chinese blight resistant chestnut seedlings, strips of Multiflora rose, and silky cornel dogwood.

In 1948 work was intensified on additional areas of its approximately 100 acres of potential tillable land. Where adaptable, contour strips were laid out, 90 feet in width and of varying lengths. To date there are approximately 40 acres of these contoured strips. They were first planted to buckwheat

and this before maturing was disced down and then planted to clovers. The edges of these strips are being planted with various food producing shrubs.

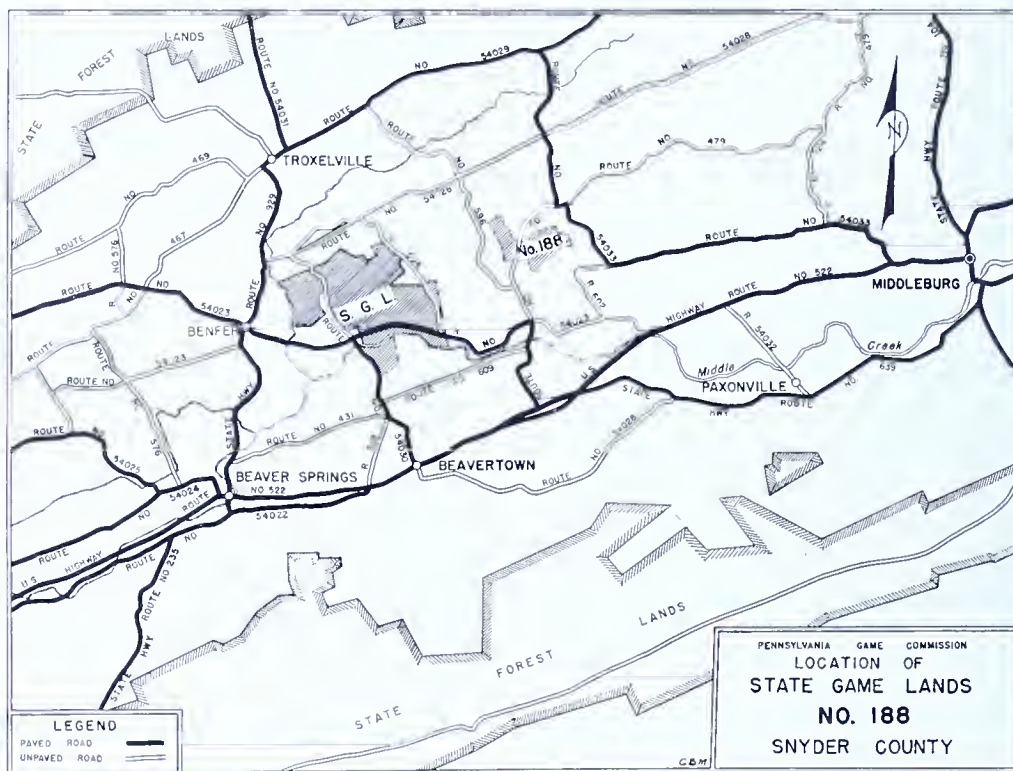
Where the evergreens were growing too thick, thinings were made, the timber sold as paperwood, and these opened areas were then given the buckwheat to clover treatment.

Food plots are also a part of the management plan for Game Lands No. 188 and at present there are three averaging about two acres in size and spaced about one and one-half miles apart. They are now planted with millet, sorghum, broom corn, and sunflower and have a very excellent growth. These are all heavy seed producing plants and should provide food well into the winter.

Game Lands No. 188 has another distinction that will become more important as the food and cover program in this Division progresses. A nursery is located here. The site was not chosen for adaptability and

fertility alone, but also because the Game Protector in charge of these lands, has had experience in preparing and caring for seed beds. It is the intention of the Division Supervisor to have grown here as many as possible of the more beneficial food producing scrubs for use in planting throughout the Division's nine county area.

With Game Lands No. 188, as with other State Game Land tracts, a more progressive and intensified land management program is being carried out. Operations best suited to the type and area of land being worked are now going on throughout the Division and will be limited or curtailed only by weather conditions or the lack of the where-with-all to get it done. It is a program desperately in need of every possible cooperation from the true sportsmen of our great Commonwealth who are sincerely interested in seeing conditions for game improved.



OUTDOOR KIDS—from Page 10

"Oh, this book matches our other two by Mr. Mason . . . 'Animal Tracks' and 'Animal Homes,'" Jane observed, "and they are all full of wonderful drawings as well as gobs and gobs of things we want to know."

The children continued to talk about their Christmas books. They had learned that they have so much more fun out-of-doors when they know something about the things which they see and hear.

For observing birds, Billy and Jane think there is no book in the world like Roger Tory Peterson's "A Field Guide to the Birds." Last summer their pop took them on a field trip with Mr. Peterson and they had their

picture taken with the man whose book they value so highly.

For help in observing wild flowers, the Outdoor Kids like Edgar T. Wherry's new book, "Wild Flower Guide," especially since it has quite a few color plates. "Meeting the Mammals" by Victor H. Cahalane is another outdoor favorite of the children.

Jane likes books about horses and has enjoyed reading "Misty of Chincoteague" and "King of the Wind."

And like most red-blooded American kids, they like the Bobbsey Twins, Lucky Terrell Flying stories, dog stories and even Horatio Alger.



Christmas Gift Suggestions for the Sportsman's Bookshelf

NORTH AMERICAN WATERFOUL—Albert M. Day. Stackpole and Heck, Inc., Telegraph Press Building, Harrisburg, Pa. Price \$4.75.

This is probably the first book to be devoted exclusively to American waterfowl administration. It was written by the man best qualified to prepare such a work, the director of the U. S. Fish and Wildlife Service. The early history of waterfowl management, the jobs of the flyway biologists, the work of federal game management agents who enforce the migratory bird hunting laws, the story of the waterfowl management program, and the Mexican waterfowl situation are all discussed in detail. The author pulls no punches and does no shadow boxing in answering critics of what is probably the best possible program of waterfowl management consistent with our modern industrialized civilization. This is a well-written book which should be read by everyone interested in the preservation of the waterfowl resource.

THE GREAT OUTDOORS—Joe Godfrey, Jr., and Frank Dufresne. McGraw-Hill Book Company, 330 West 42nd St., New York 18. Price \$6.50.

This book covers the entire field of North American hunting and fishing, from jumping cottontails to stalking moose and from fly fishing for panfish to deep-sea trolling for swordfish. Fully 20 of America's foremost outdoor writers have contributed articles on their special fields of interest to make it as authoritative as possible. It is crammed with interesting stories of the out-of-doors and with thousands of valuable facts on the selection, use, and care of hunting and fishing equipment, on camping, and on outdoor cooking. The color plates and photographs are beautifully executed and well selected. This book will make an excellent gift for any outdoorsman.

THE DOG ENCYCLOPEDIA—Henry P. Davis, Editor. Stackpole and Heck, Inc., Telegraph Press Building, Harrisburg, Pa. Price \$10.00.

Produced in the fine tradition of *The Hunter's Encyclopedia*, this book, devoted to every breed of dog, promises to be the most outstanding dog book ever produced in North America. Over 1200 drawings and photos amply illustrate sections covering practically everything that mankind knows about dogs. Sections range from the history of dogs, dog classifications, dogs in sport, dog keeping, how to choose a dog, training fundamentals, breeding, anatomy, common

Solve Your Christmas Problem For the Kiddies

By far, one of the nicest animal books for children of any age, even the little tots, ever to reach this desk is "Animal Babies", by Margaret Jean Bauer, with twelve wonderful full-page color plates of wild and domestic (mostly wild) youngsters, by Jacob Bates Abbott, well known naturalist artist of Haverford, Pennsylvania. Many readers will recognize him as one of the illustrators of *Game News* for many years. Miss Bauer is secretary to the Chief Curator of the Chicago Natural History Museum and her delightful treatment of the baby life of nature's children is worth anyone's reading—young or old. For \$2.00 you will never secure such a wealth of information or art under one cover. The book is 10 x 12 inches, well bound and every page has numerous marginal pen and ink sketches of the life history of the creatures depicted.

Publisher—M. A. Donohue & Company, Chicago 5, Illinois.

This book is a must for your own book library and a fine gift for the youngster of a relative or friend.

ailments and treatment, to registration and dog publications. Of special interest will be a section devoted to Dog Heroes of the World Wars. This book is a "must" for everyone who either owns a dog now or contemplates owning one.

WILDLIFE MANAGEMENT: UPLAND GAME AND GENERAL PRINCIPLES—Reuben Edwin Trippensee. McGraw-Hill Book Company, Inc., New York, N. Y. Price \$5.00.

This monumental work, the result of over ten years of painstaking research, covers practically everything that is known to date concerning the management of game. "Upland game" in the subtitle has been used in its broadest sense to cover all wildlife except waterfowl and furbearers. Individual chapters have been devoted to each species from the bobwhite to the moose. No effort has been spared by the author to make this treatise as complete as possible, and an idea of his success may be gleaned from the fact that the index alone contains 31 pages. This is an ideal text book for any general course in wildlife management, an excellent and indispensable reference book for the professional wildlife technician, and an extremely valuable addition to the library of any sportsman or naturalist.

THE SAGA OF THE WATERFOWL—Martin Bovey. Wildlife Management Institute, 824 Investment Building, Washington 5, D. C. Price \$5.00.

Waterfowl once blackened the skies over great areas of this continent. Today, only fragments of the vast flocks remain, and the sport of waterfowling, to which nearly two million gunners look forward each autumn, still is in jeopardy. What has become of the countless flocks that awed the first white men? What has reduced them to the remnant which we now strive to preserve? What must be done if waterfowling is to be saved as a traditional American sport? In this book through terse, vivid prose and magnificent photographs, Martin Bovey answers these questions. The 71 photographs, largely by the author and his son, and drawings by Francis Lee Jaques graphically illustrate the fast, easy-to-read text. This is a graphic book that should be on the bookshelf of every sportsman; it is of high importance to waterfowlers and to all conservationists.

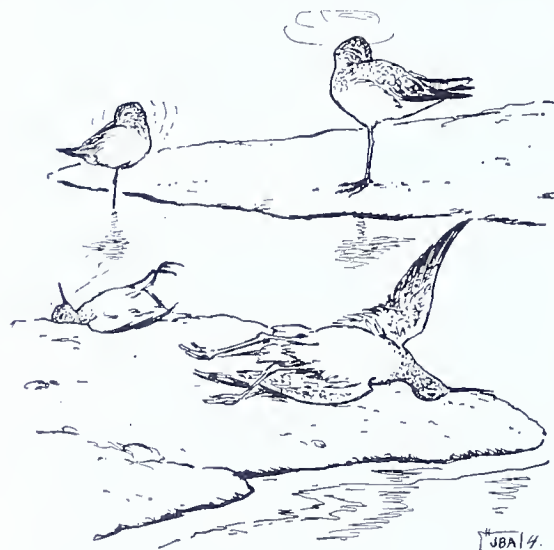
A SAND COUNTY ALMANAC—Aldo Leopold. Oxford University Press, 114 Fifth Ave., New York, 11, N. Y. Price \$3.50.

Aldo Leopold, one of the world's great naturalists, was also a leader in the conservation movement. He also had the ability to express in words of exceptional beauty his appreciation of the way of life of all wild things. In this book have been gathered the best of what might well be called his prose poems, ranging from a brief description of a wild flower to a philosophical discussion of land conservation. This book will be a permanent delight to any reader who has a true appreciation of nature and through the eyes of the author, he will be able to view the great out-of-doors in a new and different light.



One night in September while returning from Kane, I was flagged down by a motorist and informed that there was a bad accident just ahead. I pulled my car to the side of the road and went up ahead to see if I could be of any assistance. Four cars were wrecked, one car had turned over and hit a culvert and the others badly damaged. However, only one driver was injured, he having a bad cut on his arm. There was well over \$1000 worth of damages to all the cars. What was the cause? A deer had jumped in front of one of the cars and in attempting to miss it, the resulting mixup occurred. Wet roads were another contributing factor in the smashup. Motorists should be a little more careful about their speed when they are in deer country.—Game Protector Bill Overturf, District F-13, Marienville.

During September Howard Hahn, a Farm-Game Cooperator, came to my home with a large gray fox he had killed and related the following story. Mr. Hahn heard the dogs barking near his home and when his son went to investigate, he found that the dogs had treed a "raccoon." Mrs. Hahn then went out to see the raccoon but soon returned to say that the animal actually was a fox. Mr. Hahn then went out and shot a gray fox from the tree. The fox had climbed a walnut tree about a foot in diameter to a height of 20 feet and was sitting in a fork of the tree when Hahn shot him.—Game Protector Edward M. Borger, District A-4, Stockertown.



On September 5th members of the Delaware Valley Ornithological Society discovered large numbers of dead shore birds in the marshes of Tinicum Township. At first it was thought they had been shot but upon closer examination no gunshot wounds were found. About 75 birds were picked up that were still alive. These birds were taken to the Philadelphia Zoo and about 40 responded to treatment and are now in good condition. It was believed that the birds had contracted botulism. Although most of the birds were found near fresh water, they evidently had contracted the disease in a nearby section of the Delaware River, where mud is being pumped from the bed.—Game Protector Dan McPeck, District A-21, Media.

While attending a meeting of the Bagdad District Sportsmen's Association in September, Steve Lucjok, RD 1, Leechburg, reported the following unusual occurrence to me. While training a young rabbit hound early in September near his home, the pup jumped a rabbit and started the chase. The rabbit outdistanced the dog and ran into an orchard where it stopped and sat up to look things over. Just then an apple dropped from the tree under which the rabbit was sitting and struck the bunny on top of the head. Mr. Lucjok walked over and found that the apple had killed the rabbit instantly.—Game Protector W. J. Brion, District G-4, Kittanning.

Recently Robert Reed of Lewisburg told me that this past spring while fishing for trout in White Deer Creek, he witnessed a very unusual act. Mr. Reed had stopped to rest on the bank of the stream near a good trout hole when he heard a noise in the brush. He couldn't imagine what was happening but soon saw a fawn deer run out of the brush into a riffle. A large mink was running alongside of the deer, jumping at its neck. Reed took a swat at the mink with his landing net and succeeded in chasing the mink away from the fawn. The little deer next stopped on a little knoll overlooking the stream and the man figured that the mink had given up the chase. However, a few minutes later the mink reappeared from behind a log and started for the fawn again. Once more Reed took after the mink with his landing net, scaring it off the second time. Both animals then disappeared into the brush, leaving Mr. Reed to wonder if the chase would be resumed in his absence.—Game Protector Albert Kriefski, District C-14, Lewisburg.

Another report was received in September regarding a fox chasing a dog. This time Mr. Walter Hinds was giving his beagle field training in a swamp near his farm when a grey fox chased the dog out of the swamp to within 50 feet of the man. This is the second report of that kind I have had in this district.—Game Protector Joseph L. Budd, District B-9, Lake Ariel.

While on foot patrol in Hamilton Township during September, I noticed a corn stalk laying on the ground some distance from a corn field. Something made me notice this stalk and as I watched it, I observed that it was shaking in a peculiar manner. I eased up to the stalk and as I neared it, I noticed that it was laying across a groundhog hole. There was a large ear on the stalk and the ear was sticking down into the groundhog hole. As I got close to the hole, I got a glimpse of Mr. Groundhog. I lifted the stalk and, sure enough, there was old Man Groundhog down in the safety of his hole, nibbling away at his meal of corn.—Game Protector Ed Campbell, District D-19, Chambersburg.





It's about time something is done about the greater predator of them all—the automobile. In September a sportsman related to me that he had witnessed a motorist deliberately run into a clutch of young ring-neck pheasants, killing eleven out of the flock. He could not get the license number of the auto, so another “human predator” will go unpunished.—Game Protector Jackson Kepner, District A-10, Manchester.

In September I witnessed my first sight of beaver damage on a corn field here in this district. Near Wattsburg beaver from French Creek apparently have cleaned up all the available natural food and have climbed the bank into a corn field. There they have cut and removed approximately 10 to 15 bushels of corn on the stalk. Their cuttings look like someone had cut the stalks with a knife at about the same height that a farmer would cut the corn. However, the slide trail shows who the culprit is and where the corn is going.—Game Protector Cliff Ruth, District F-2, Erie.

During late September great concentrations of squirrels could be found in farm woodlots where there was an abundance of walnuts. They were also working the corn fields. I saw a black squirrel in Spring Township. Although tradition has it in this county that the black squirrel is not found south of the Bald Eagle Creek, this is the second black squirrel that I have noticed south of this creek in twelve years.—Game Protector Joe Kistner, District E-22, Howard.



While working on food plots on State Game Lands 127 during September, I observed a woodchuck sitting up in the first fork of a stalk of corn. The animal was up about a foot or so from the ground, nonchalantly chewing away on an ear of corn. I have heard of woodchucks climbing trees but this is the first experience I have had with one climbing a stalk of corn.—Game Protector Vic Shaffer, District B-17, Thornhurst.

Our food plots are doing a good job. One farmer, who lives in Robertsdale and a short distance over the mountain from State Game Lands 67, told me that last year the deer about ate him out of house and home. He has a six acre corn and a six acre buckwheat plot just below a ten acre plot of buckwheat on the Game Lands. During September I inspected the area and there was barely a deer track to be found in his crops. On the Game Lands the plots were full of deer tracks and they were eating it so hard that it was not making much growth. The farmer had buckwheat about two feet high. Also, on September 18 in the evening I watched



three grouse feeding in our buckwheat fields. The rye grass that is sown with the buckwheat should also furnish good deer food and turkey “greens” throughout the winter months.—Game Protector John Hiller, District D-11, Saxton.

On September 24th I supervised the release of 200 ringneck cockbirds raised by the Carlisle Fish & Game Association. The club is holding 225 hens and 20 cockbirds for spring release. The 1949 record of the club is 91% of the chicks received raised to maturity. Mr. D. W. Sheaffer, Carlisle, businessman, is chairman of the Game Committee in charge of rearing the birds and has done a remarkable job.

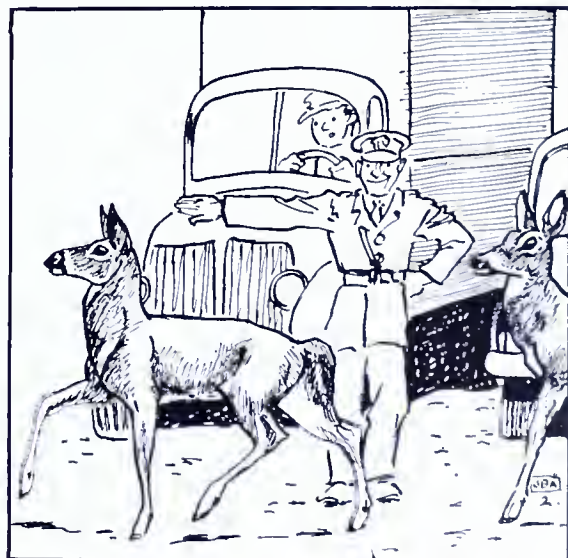
On September 25th I supervised the release of 100 cockbirds raised by the Boiling Springs Sportsmen's Club. This group raised 88% of the chicks received and is also holding the hens for spring release. Melvin Kocher was in charge of rearing these birds. These two clubs are surely doing their bit in improving ringneck hunting in Cumberland County.—Game Protector Homer H. Thrush, District D-14, Boiling Springs.



While checking deer on the Indiantown Gap Military Reservation with the aid of a light, we have observed from eighty to a hundred animals during one night's patrol. The sad part about our observations is that very few antlered deer are in evidence. We have noticed that many does possess only one fawn, regardless of the condition of the does.—Game Protector Mark P. Motter, District A-5, Harrisburg.

Mr. Charles Fretz of Pleasant Valley reported having found a nest of young rabbits which did not have their eyes open the last week of September.—Game Protector Ed Flexer, District A-9, Quakertown.

A call was received in September that two deer were running loose in the Fairview Cemetery which is well in the heart of Allentown. Rushing to the scene, I found a badly frightened doe and fawn trying to escape from the curious crowd that had gathered. Hindered greatly by excited on-lookers, we managed finally to drive the deer along the streets, aided by the city police who held up traffic to let us pass. We eventually reached the outskirts of the city where the animals disappeared into the cornfields.—Game Protector Bill Moyer, District A-3, Allentown.





Southeastern Division

Congratulations are in order to the Southeastern Division of the Pennsylvania Federation of Sportsmen's Clubs for the highly successful membership campaign started four years ago. According to Secretary Ellen Dietrich, the Division now boasts a membership almost twice as large as that of four years ago and has enrolled 50,303 sportsmen representing 171 clubs.

Warren County Field and Stream Club

Starting in October letters mailed from the Warren post office had the distinction shared by those going from no other post office in this part of the country. The stamps on each letter mailed in the local post office were cancelled with the statement, "Remember—only you can PREVENT FOREST FIRES."

The cancellation reminder was part of a campaign carried out as part of the Co-operative Forest Fire Prevention Program, a joint venture of the U. S. Forest Service, the various State Departments of Forestry, and the Advertising Council of America. The cancellation dies are now being used in 82 cities in the country—48 for the first time last fall. Warren was one of the very first in the northeastern section of the country and the only one in Pennsylvania to qualify.

Since these dies were purchased by private groups and organizations, it was through the support and financial contribution of the Warren Field and Stream Club that the postmark was possible. Richard J. Costley, Supervisor of the Allegheny National Forest paid special tribute to the club for this unique way of emphasizing forest fire prevention.

North Side Sportsmen's Association

The North Side Sportsmen's Association of Pittsburgh recently elected the following officers for the coming year: W. Wable, President; W. Shrock, Vice-president; W. Cameron, Secretary; J. Johnson, Treasurer; and H. Tate, Financial Secretary. Many entertaining programs are being arranged for the 1500 members of this Association and an all-out drive will soon be in full swing to increase the membership to 2000. The club hopes to "burn the mortgage" to the club farm of 206 acres located in Warrendale before the end of the year.

CLUB NOTES

Terry Lee (Butch) Brubaker, of Camp Hill, showing the "younger" sportsmen how at the Harrisburg Hunters & Anglers Club Field Day in September. "Butch" is currently five years old.



Lycoming Consolidated Sportsmen

At a recent meeting of the Consolidated Sportsmen of Lycoming County held in Hughesville, John H. Bender, chairman of the Game Committee, announced that the club had released 1800 ringneck pheasants raised at the club's Memorial Grounds on the Loyalsock. The club also hopes to have a skating pond in operation this winter, has made plans to plant memorial trees, clear a fire trail over the hill on the eastern boundary, and fence in the area on the creek side of the road. The Lycoming group also plans on planting about 10,000 shrubs to provide game food and cover next spring.

York Izaak Walton League

Taking the lead from the new craze for outdoor movies now spreading across the country commercially, the York Chapter of the Izaak Walton League of America recently opened their own "Drive-in Theatre" at Waltonian Acres, the club farm. The "Ikes" have constructed a miniature outdoor theater, including a large sized screen and parking facilities, and are featuring hunting and conservation pictures. One program in October was devoted to a "Safety In Hunting" theme. The club also got their new boy's chapter underway in October with more than thirty boys registered.



Three way cooperation to give better hunting was used this summer by the Franklin Chapter, IWLA, the Game Commission, and a landowner, of Bully Hill. The Chapter purchased fencing and materials which members used in constructing holding pens under the supervision of Game Commission representatives. The Commission also furnished the day-old chicks. Shown here, left to right, are Ralph Ewing, Game Protector, John Eagles, Gerald Banister, Herb Bevington, George Krepp, IWLA members, and Bill Campbell, Wildlife Protection Assistant. Standing, left to right, are Robert Gilmore, Cleon Douglas, Wes Lowrie, and Meade Krepp, IWLA members.



THAT DEER RIFLE

By ED SHEARER

DEER HUNTING began for me with the stopping of running deer by use of hounds. That is some miles back down the trail. Those were the days when black powder was making its last stand against the new-fangled smokeless "that you cain't re-load nohow!" The argument then was the old standbys—38/40, 44/40, and 38/55—against the new 30/30. A few dissenters favored the .303 Savage as the best means to fill the pot. I can show you a live deer today more easily than I could have shown you a deer track then.

My first deer rifle was a 44/40 Model 73 Winchester. It had a beautiful circassian walnut stock and was nickle plated. I could stuff a pocket full of shells in the magazine (and religiously did). It had a soul-satisfying roar and emitted a pall of smoke in the best tradition of Daniel Boon's famed "Betsy." A huge hunting knife with nine-inch blade and deerfoot handle, together with a hand axe of the same proportions, completed my outfit. The memory of it keeps me from being astounded by the youth of today. It weighed nine pounds without the ammunition and it put a considerable bow in my young shoulders at the end of a hard day although I would never admit it.

I was on every deer drive if the sun was shining. Uncle Pete, our negro guide, cook, and my personal mentor, said one night, "We ain't got houn's no mo but we sho have Ed an dat holy gun." Old Pete's gone these many years but he left me a rich legacy of woods lore.

Today there is still no more debated question than the one we asked nearly a half century ago. What is the best deer rifle for our eastern hunting conditions? In trying to answer that question for myself I have shot deer with guns ranging from a .22 cal. pistol to a .405 Winchester. That old .405 with its back-kick and muzzle blast was a terror. The only thing I ever shot that was worse was a double barrel Holland .450. An acquaintance who hunted in Africa suggested that I try it. I took two shots and promptly forgot any desire to kill me an elephant.

Range and power were my ideals in a perfect deer rifle. Range to hit 'em as far as you could see 'em and power to knock 'em dead with one shot hitting anywhere between breech and home base. I acquired reloading tools like a hound dog picks up fleas. Ballistics, interior and exterior, became my bible. There was a range in my cellar and within ten minutes from there, I had the use of a two hundred yard range equipped with bench rests. Camp Perry and Sea Girt also taught me long range shooting. In addition I kept careful records of kills made and those I witnessed. The caliber, weight and type bullet, velocity and range were all marked down. The range was always paced to where the hit was made and one thing I learned early was that most hunters, if they measure at all, take the distance from where they stood to where the deer lay. Thus, if a deer was shot at one hundred yards and ran another hundred, it became a two-hundred

(Continued on Page 28)

LOOKING BACK

By HERBERT KENDRICK

NOW THAT another glorious hunting season has become history and we have separated the events worth remembering from those we want to forget as quickly as possible, it is an appropriate time to study our errors and make plans to correct them long before another season approaches. For a brief moment, let us forget the excited anticipation of opening day, the first staunch point, the perfect kills, classy retrieves, and deliberately pick out the faults in ourselves and our dogs in a sincere effort to eliminate them by careful study and wise planning.

First of all, were your dogs conditioned and sufficiently hardened to undergo the terrific strain of a difficult opening day of hunting? During the late winter, spring, hot summer and fall, were your dogs properly fed, comfortably housed and properly exercised every day? Did you stay close to them, love them, and make them feel they were important parts of your life? Were those irritating little faults corrected while you had the time to be patient and thorough in your dog training? If you did these things you were amply rewarded time after time each day you were afield. If you failed, you have the opportunity now before you, to make certain you will have them properly prepared for next season. We all know well that we cannot expect superlative performances in the field if we wait until frost time to get the dogs in shape.

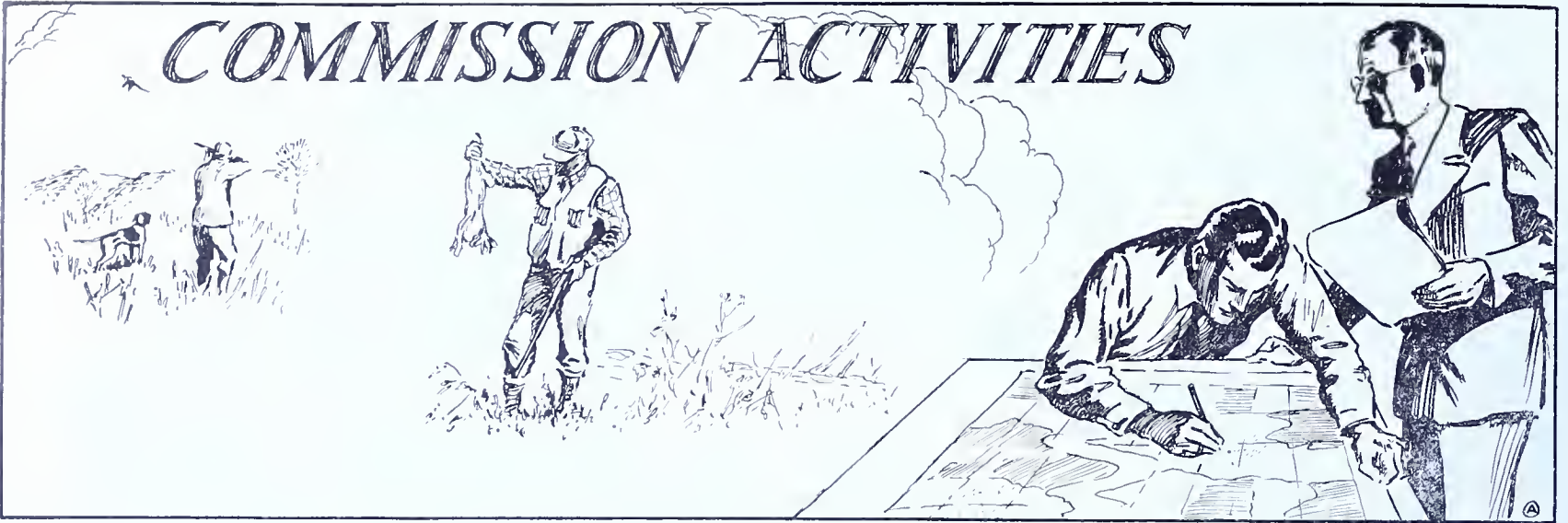
Since the majority of us have to hunt on someone else's property, it will pay us to think seriously of our conduct while being the other fellow's guest. Did you have the proper respect for his winter crops? It takes only a few minutes longer to walk around a new wheat field and the farmer will take a greater pleasure in having you hunt his lands. Were you positive your dogs were called in to heel near pastures where livestock grazed? If you did, you not only considered your host but you played it safe for your valuable gun dog. I have seen a young mule end the life of a young pointer that ran too close to his heels. Watch an experienced dog trainer steer his dogs away from livestock and you will be inclined to follow his cautious methods.

Were you thoughtful enough to close the farmer's gates, protect his fences, and when you had a heavy game bag, did you offer to share it with him? Strengthening the bond between sportsman and farmer is worth your most sincere efforts.

When your gun came out of its case, did you handle it properly and safely throughout the entire season? Was it broken down until you were in the field, and was it unloaded when you went through fences? Did you point it at any living thing you did not want to kill? Were there times when you shot too close to buildings, too close to your dogs, too near your partner and did you take long unreasonable shots at game because you were merely "trigger happy"? Do not wait until you have accidentally and carelessly killed or injured a companion to learn the proper method of handling firearms. Your gun is a highly important part of your hunt-

(Continued on Page 26)

COMMISSION ACTIVITIES



Death Claims Commissioner H. E. Kilgus

Just as this issue of Game News went on press, word was received that Dr. H. E. Kilgus, Brockway, died in the Williamsport Hospital following a series of operations. Dr. Kilgus faithfully served the sportsmen of Pennsylvania as a member of the Pennsylvania Game Commission since July 22, 1943 until his death on November 12, 1949. A full memorial to him is being planned for the January issue.

Botulism Hits Susquehanna Ducks

Beginning on October 2nd sick and dead ducks were picked up in the Susquehanna River below Columbia. Most of the birds were located about the islands opposite Washington Borough.

The Game Commission, through its Wildlife Research Division and with the cooperation of its field officers and local sportsmen, kept a constant check on the area. Dead and diseased birds were sent to the laboratory of the State's Bureau of Animal Industry where examination results indicated botulism.

Botulism is a disease caused by a toxin produced by an organism found in decaying animal or vegetable matter. Stagnant pools that do not flush out, such as those in the river near Washington Borough, retain rotted vegetation that produce ideal conditions for the toxin to develop. The disease produces symptoms in ducks ranging from stupor, unsteady and weak legs, dropping wings, to limp necks. Botulism is often commonly called "limber-neck."

There are no known records to indicate that man is susceptible to this type of botulism and it is generally agreed that thorough cooking destroys the particular organism. Nevertheless, duck hunters were urged to avoid Washington Borough during the past season and were requested to shoot only flying ducks in surrounding areas to reduce the chances of taking diseased birds.

Botulism seldom persists in an area two years in succession. The disease will only remain in a given location until cold weather kills the organism or until high water flushes out the danger area.



Ross L. Leffler, President of the Pennsylvania Game Commission, became the only individual civilian in Pennsylvania to receive a citation from the United States Marine Corps last spring. The citation was given him for his cooperation and efforts in furthering the interests of the Marine Corps. Shown here, left to right, are Warrant Officer Frank J. Kossyta, Assistant Officer in Charge, Marine Corps Recruiting District of Pittsburgh; Major Norman A. Miller, Jr., Assistant to the Director, 4th Marine Corps Reserve District, Philadelphia; Mr. Leffler; and Technical Sgt. Ernest B. Brown, Public Information Sergeant, Marine Corps Recruiting District of Pittsburgh.

Passenger Pigeon Seen Again

The Passenger Pigeon, extinct in Pennsylvania for more than forty years, and now extinct everywhere, is seen again in its favorite habitat in a new exhibit in the Museum of the Academy of Natural Sciences of Philadelphia.

In Audubon Bird Hall is shown a glade in the Tionesta forest near Kane, McKean County, Pa., the beeches filled with passenger Pigeons. In the foreground, on branches simulated from nature in the

Museum, are 20 specimens of the Passenger Pigeon from the study collections of the Academy, collected long ago.

Charles M. B. Cadwalader, President of the Academy, selected the site. He wished to show the beeches in the fall, just as the birds were flocking to migrate. The resulting scene is colorful with the yellows, greens and browns of the foliage and the reds of the pigeons' breasts. Arthur A. Jansson painted the background. The group was designed by Harold T. Green. Opening October 21 with a preview for Academy members, it may be seen daily thereafter.



A graduate student from Switzerland recently spent several days studying Game Commission activities in Pennsylvania. Shown here, left to right, are Robert D. McDowell, Chief of the Wildlife Research Division, Dieter Burkhardt, University of Basle, Switzerland, and Wilmer C. Richter, Leader of Pittman-Robertson Project on cottontail rabbit.

Wild Turkey Comes Back

In the post-war years, rabbit and pheasant hunting have not been up to pre-war standards in Pennsylvania and in other sections of this country. In those years, the wild turkey has staged a remarkable come-back in the Keystone State.

Wild turkeys in the Commonwealth were at a low ebb in 1929, when the first wild turkey farm was established in Juniata County. It was difficult at that time to obtain wild stock for breeding purposes and progress was necessarily slow. It was desired that the production of wild turkeys be increased from the original few dozens to several thousands annually.

The State's wild turkey farm was moved to Lycoming County in 1945, to a site much more desirable for propagating purposes. There the first year's production was 2,000 birds. This figure was increased to 5,000 in 1947. In 1948, wild turkeys propagated at the new farm and released in natural habitat in Pennsylvania totaled 5,527.

The principal cause of the decline in Pennsylvania's wild turkey flocks is laid to the loss of the chestnut; the main reasons for their encouraging return have been successful and increased propagation, coupled with winter feeding of corn at feeders, beginning soon after the hunting season.

The return of Pennsylvania's wild turkeys was speeded, too, by the establishment of twenty-two fenced-in turkey propagating areas of ten to fifteen acres each. Wing-clipped hens are placed within these protected areas each year to mate with wild toms that fly in from the surrounding territory. Eggs are gathered from twelve of these areas for incubation at the turkey farm, where the birds are continually bred back to maintain a wild strain. In ten such areas the broods are allowed to fly out with their refeathered mothers to populate the range adjacent.

Pennsylvania Gets Large Share Of Pittman-Robertson Fund

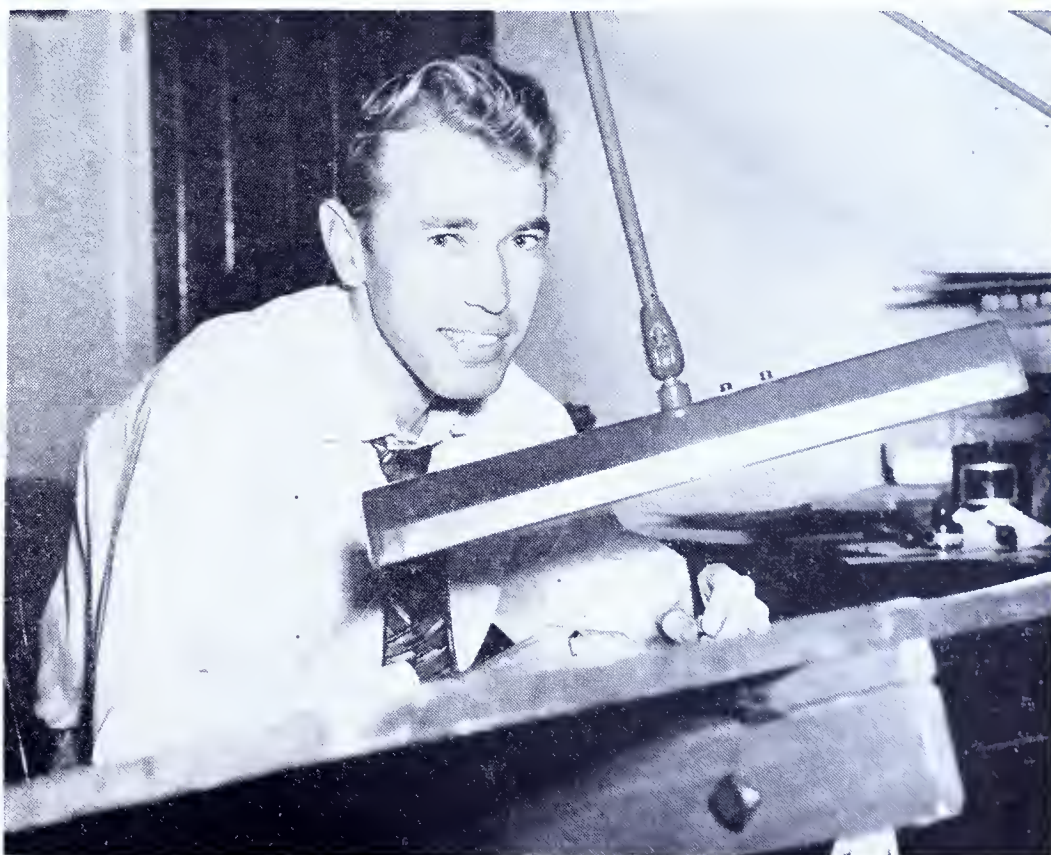
The Game Commission was notified late in October by the U. S. Fish and Wildlife Service that Pennsylvania's portion of the Pittman-Robertson fund for the federal fiscal year ending June 30, 1950, is \$431,888.83. This money is used to finance 75% of the cost of state wildlife projects that have been federally approved, the remaining 25% being allocated from the Game Fund.

Bird Bands Should be Returned Promptly

Aluminum bands, which hunters may find on the legs of some migratory game birds, form the principal source of information on the movements and habits of feathered legions. The importance of sportsmen returning recovered bands cannot be over-emphasized, the Wildlife Management Institute believes. Those found but not returned to the U. S. Fish and Wildlife Service represent much more time, money, and hard work wasted than most hunters realize.

A band from the leg of black duck bagged by a hunter in North Carolina may have been placed on the bird by a technician in northern Canada after miles of travel by plane, by canoe, and on foot. A pintail banded in Utah may show up in the bag of a hunter in Hawaii. Individually these returns mean little, but when added to other records in the files of the Fish and Wildlife Service, each return serves as a piece of a jigsaw puzzle—when enough are assembled, a pattern becomes sharp and clear. Returned bands have told scientists where ducks from the various breeding grounds spend the winter. They tell the route birds take in their seasonal migrations and the life expectancy of the various species. All of these data are essential as the basis for a sound waterfowl management program.

When a band is found on a game bird's leg, it should be removed and placed in an envelope with a card telling the place and date of recovery and the number of the band. Straightening the band may prevent its tearing through the envelope and being lost in transit. The band the hunter sends in may be the key which will unlock some hitherto unknown fact about the life history and needs of his favorite game bird.



Appointment of E. Stanley Smith, Millersburg, to the position of resident Staff Artist was announced recently by the Commission. "Ned," shown here, has been a regular art contributor to the pages of Game News for the past two years and will assist in all of the Commission's art needs.

Oregon Tests New Pheasant Release Method

More adaptable, better conditioned and lower priced game-farm pheasants are promised by a new system of propagation developed by the Oregon Cooperative Wildlife Research Unit, which now is being given a state-wide test by the Oregon Game Commission, the Wildlife Management Institute reports.

On each project about ten acres of good game range are leased on privately owned land, and field coops, in each of which are placed a domestic hen and a brood of day-old pheasant chicks from a game farm, are set up. The hen is restricted to the coop while the young pheasants have access to natural feed and habitat outside. For approximately six weeks, the young birds are fed by an attendant. After the birds have become adapted to their natural environment the coops are removed and the young birds are allowed to disperse and shift for themselves. In some cases surplus birds are trapped for transplanting in other areas. If a preliminary study shows it to be necessary, a predator control program is carried on at the release site. Under this system the cost per bird is only about 50 cents, far below that for birds reared on game farms to the release age.

Other than cost, the method has several other advantages. The birds are much better able to cope with problems of survival and are better conditioned to local climatic conditions than those reared in pens. The survival rate under this system usually averages approximately 70 per cent under normal conditions. Handling is simple and one attendant can care for as many as 3,000 birds. In the Oregon program, projects were organized in nine different counties this summer, and a good supply of pheasants raised by these methods will supplement wild birds available to hunters in Oregon this fall.

This method of release has been tested and developed since 1947 by the Cooperative Wildlife Research Unit at Corvallis under the leadership of Arthur S. Einarsen, who was aided in this work by Francis Schneider, assistant Unit leader. Similar trials were conducted this summer in the Colville Valley of Central Washington under the direction of Burton Lauckhart, chief game biologist.

Pennsylvania Game Commission Resident and Non-Resident Hunter's Licenses Issued By County

Counties	Resident 1947	Resident 1948	Non-Resident 1947	Non-Resident 1948
Adams	5,687 (...)	5,881 (40)	278	328
Allegheny	63,630 (115)	64,209 (264)	213	232
Armstrong	12,003 (...)	12,844 (39)	105	105
Beaver	12,935 (...)	14,075 (19)	347	360
Bedford	8,145 (...)	8,062 (21)	540	535
Berks	23,893 (73)	24,691 (112)	50	63
Blair	17,268 (44)	17,856 (89)	180	142
Bradford	9,177 (12)	9,395 (32)	780	710
Bucks	10,470 (100)	10,454 (165)	617	696
Butler	12,168 (39)	13,367 (...)	238	219
Cambria	22,423 (1)	23,838 (32)	170	198
Cameron	1,532 (16)	1,477 (12)	286	220
Carbon	6,119 (21)	6,557 (34)	72	74
Centre	11,841 (34)	11,930 (54)	166	171
Chester	14,672 (29)	15,121 (30)	308	352
Clarion	8,206 (13)	8,044 (22)	252	273
Clearfield	14,330 (58)	15,529 (62)	519	459
Clinton	7,487 (58)	7,328 (76)	170	165
Columbia	8,228 (35)	8,435 (50)	74	91
Crawford	13,311 (27)	14,003 (28)	476	494
Cumberland	11,915 (89)	12,990 (132)	47	62
Dauphin	19,288 (456)	19,735 (500)	155	202
Delaware	12,816 (42)	12,952 (40)	131	158
Elk	6,481 (25)	6,236 (21)	523	499
Erie	20,725 (34)	22,277 (49)	653	724
Fayette	17,730 (19)	19,784 (39)	204	222
Forest	1,324 (...)	1,225 (3)	378	408
Franklin	9,934 (39)	10,647 (51)	282	289
Fulton	2,512 (13)	2,356 (...)	108	135
Greene	4,526 (14)	4,820 (19)	116	95
Huntingdon	7,639 (28)	7,716 (43)	116	179
Indiana	12,747 (21)	12,806 (26)	238	250
Jefferson	11,603 (27)	11,795 (21)	925*	1,075
Juniata	2,781 (...)	2,712 (11)	25	27
Lackawanna	13,471 (60)	14,340 (82)	217	197
Lancaster	27,654 (72)	28,657 (87)	170	194
Lawrence	10,840 (33)	11,967 (61)	1,120	1,109
Lebanon	10,955 (...)	11,237 (53)	43	36
Lehigh	12,392 (81)	13,098 (95)	93	119
Luzerne	30,324 (100)	31,155 (134)	305	372
Lycoming	15,719 (63)	15,872 (84)	282	302
McKean	11,041 (18)	10,655 (28)	1,363	1,284
Mercer	14,807 (12)	15,642 (30)	1,786	1,651
Mifflin	7,889 (70)	8,099 (70)	134	132
Monroe	5,881 (25)	5,875 (31)	565	559
Montgomery	23,007 (51)	22,816 (53)	55	56
Montour	2,075 (12)	2,114 (27)	17	20
Northampton	16,931 (38)	16,719 (36)	693	653
Northumberland	14,281 (32)	14,747 (31)	49	61
Perry	4,200 (...)	4,442 (25)	25	40
Philadelphia	21,372 (289)	23,429 (238)	469	551
Pike	1,498 (6)	1,531 (18)	1,767	1,673
Potter	3,889 (23)	3,711 (27)	1,185	991
Schuylkill	18,789 (45)	20,165 (44)	64	79
Snyder	3,430 (...)	3,518 (...)	8	13
Somerset	12,463 (47)	13,549 (75)	270	281
Sullivan	1,385 (10)	1,505 (8)	78	71
Susquehanna	4,823 (...)	4,878 (...)	424	355
Tioga	7,343 (16)	7,529 (22)	764	719
Union	3,505 (22)	3,638 (16)	42	38
Venango	10,328 (31)	10,816 (50)	888	872
Warren	6,839 (...)	6,821 (20)	1,517	1,220
Washington	16,438 (14)	20,334 (24)	452	420
Wayne	4,876 (22)	4,807 (26)	494	559
Westmoreland	32,295 (125)	33,067 (69)	263*	290
Wyoming	2,752 (11)	2,801 (...)	86	90
York	22,268 (66)	23,146 (70)	344	401
Dept. of Revenue	1,067 (...)	983 (...)	2,238	2,465*
Totals	822,423 (2876)**	854,840 (3770)**	28,012*	28,085*

* Includes alien Non-Resident Hunters' Licenses issued as follows: 1947, 4; 1948, 7.
** The figures in parenthesis indicate "Free Licenses Issued to Members of the Armed Forces," which are included under column "Resident Licenses."

DISTRICT 10
GAME WARDEN



"Did he fine you much?"

What is the Status of the Fox?

To most fox hunters, the fox is the paragon of virtue; to many quail hunters, it is the lowest form of life. Serious wildlife students long have recognized that the truth lies between these extremes, according to the Wildlife Management Institute.

Under normal conditions, foxes kill fewer birds than most sportsmen believe. The bulk of their diet is made up of rodents which destroy game food plants and crops. While foxes kill many rabbits, cottontails have a tremendous reproductive capacity, and there is no known record of foxes alone having eliminated all rabbits from adequate habitat. On the other hand, foxes, permitted to increase without control, may decrease rabbit

populations substantially, invade poultry yards, and may, themselves, become ravaged by disease. Rabies has been prevalent in some southern states while sarcoptic mange has scourged foxes in the North.

The position of the game technician, treading the middle ground between extremists in both camps, is summed up by Earl Franklin Kennamer in the October issue of "Outdoor Life" in an article entitled "Friend or Foe? Facts on the Fox." As wildlife extension specialist in Alabama, he knows both sides and the middle ground as well. Squabbles between factions of sportsmen always are unfortunate. There is a real basis for understanding in the unbiased scientific facts.

Transactions of the Commission's Meeting, October 6, 1949

The Fall meeting of the Pennsylvania Game Commission was held at Bethayres on Thursday, October 6, 1949. A regular quorum being present as prescribed by law, the Commission proceeded to consider and act upon various items of business, as follows:

Policy For The Allocation of Monies For Use of Food and Cover Development

The following policy concerning the allocation of monies by Field Divisions for use in food and cover development was adopted: One-third of the total State allocation for food and cover will be distributed to each division on the basis that acreage of State Game Lands in each division bears to the total acreage of State Game Lands in the State. One-third of the total allocation will be distributed to each division on the basis that acreage of Farm-Game Cooperative lands in each Division bears to the total acreage of Farm-Game Cooperative lands in the State. Finally, one-third of the total State allocation will be distributed to each division on the basis that the total resident hunting licenses issued within all counties of each division bears to the total resident hunting licenses issued in the State. In arriving at the base figure for each of the above three factors, the most recent figures available at the time of preparing the budgetary allocations shall be used.

Policy For Per Diem Pay of Deputy Game Protectors

The Commission approved employing Deputy Game Protectors at a new rate not to exceed \$7.50 per day because of the general increase in the cost of living. Actual subsistence and travel expense including the use of personal automobiles at the approved State rate while on official duty was also approved when authorized by the Division Supervisor.

Enrollment of Sixth Student Officer's Class

It was agreed to entroll a student class for the Ross Leffler School of Conservation for a one year's course of instruction beginning as much in advance of June 1, 1950 and as early as February 1, 1950, if possible. The class to consist of approximately 20 students but not to exceed 25 students from Pennsylvania, providing outstanding applicants are available. The enrollment of students for training from sister conservation departments in Pennsylvania, or from conservation departments of other States under existing regulations, but not to exceed a total of 30 students for the proposed class, was authorized.

Plan To Provide Pennsylvania Rabbits For Propagation and Distribution

A plan to provide Pennsylvania cottontail rabbits for propagation and distribution, as discussed in detail elsewhere in this issue of *Game News*, was approved. It was further decided that any farmer cooperating under a Rabbit Farm Agreement would also be permitted to raise ringneck pheasants on the same basis as approved for Farm-Game co-operators.

Payment For Providing Nesting Islands

It was decided to pay \$1.00 to farmers and members of their family, or tenants, for each small island of cover left around a pheasant or quail nest during the first mowing of alfalfa, clover and timothy hay.

Turkey Protection and "Wilding" Pens

The Commission agreed to establish a maximum of two large holding areas for holding young tom turkeys for approximately six weeks each Fall to acclimate them to conditions in the wild. One pen will be located in Division "D" and one in Division "E", each area to hold approximately 1250 toms.

Extending Day-old Chick Program

It was decided that any farmer whose land is open to public hunting and who has the required equipment and can comply with the Commission's regulations be allowed to cooperate in the day-old pheasant chick program. These co-operators will receive the five pounds of feed for each chick and \$1.00 for each bird raised to 12 weeks of age that is healthy, well-feathered and full-winged.

Chemical Control of Forest Growth On State Game Lands

Since utility companies are using chemical sprays to control forest growth on their rights-of-way, it was adopted that licenses issued for rights-of-way on State Game Lands shall provide that no chemical spray shall be used on the licensed area.

Opening Certain Propagation Areas to Antlerless Deer Hunting

By appropriate resolution, the Commission agreed to open certain propagation areas in Berks, Snyder, Montour, Columbia, Lycoming, Clinton, Venango, Mercer, and Crawford Counties for legal antlerless deer hunting on December 10, 1949 because the presence of an excessive number of antlerless deer on these areas has been found to be seriously interfering with their proper operation and management.

New Cooperative Farm-Game Projects

The Commission approved the establishment of six new Farm-Game Projects as follows: In Washington and Meshoppen Townships, Wyoming County; in Eldred and Hepburn Townships, Lycoming County; In Washington, Warrington and Monaghan Townships, York County; in Eldred and Ross Townships, Monroe County; in Ligonier Township, Westmoreland County; and in East Wheatfield Township, Indiana County.

License Restorations

By separate motions made, seconded and agreed to, the Commission approved the following hunting license restorations: Browne, Alfred A., Thornhurst, Pa.; Bundy, Rev. Lyle S., 520 Turnpike Ave., Clearfield; Ream, Norman, 2138 N. 6th St., Harrisburg; Lentz, George W., R. D. 3, Williamsport; Welshans, Harold H., R. D. 2, Jersey Shore; Kline, Charles H., 22 Grant St., Shickshinny; Johnson, Lloyd J., 17 E. Butler St., Shickshinny; Dunn, Frank R., 249 E. Maple St., Kingston; Williams, Harry M., State College; and McCown, Richard B., State College.

Time and Place For Next Meeting

It was decided to hold the next meeting at the Commission's offices in Harrisburg on January 12, 1950.



Photo by Chick.
These nine gray squirrels cost two Huntingdon Countians \$90 and costs in October. They pleaded guilty before a Huntingdon squire after their arrest by Game Protectors in Penn Township on a pre-season hunting expedition.

PROGRESS—from Page 2

training last summer. That should put them on their toes and prepare them to do a better job than ever before. In this refresher training, however, we have been most emphatic in our insistence that punishment for violations through fines and revocation of licenses must be for real violations, not technicalities. With that, every good sportsman will agree.

7. "Provide the Game Protectors With Two-Way Radio Communication Facilities Where Feasible, to Improve Law Enforcement and Safeguard Their Lives While Performing Their Work."

While 2-way radio communication has not been found practical throughout Pennsylvania, except at prohibitive cost, it is employed to a limited degree and will be expanded as fast as we can obtain efficient sets at reasonable cost. The effectiveness of such a complete system cannot be overestimated and some of these days we'll realize it.

8. "Provide the Game Protectors With Adequate Equipment in Addition to the Two-Way Radios so They May Have the Best Possible Tools to Use in Apprehending Violators."

Essential law enforcement equipment, such as pistols, holsters and binoculars, have been purchased and furnished to our game protectors for the first time in the history of the Commission. In addition, both heavyweight winter work uniforms and lightweight summer work uniforms are being provided. In these uniforms and with new essential equipment our officers will be equipped to do a much better job than heretofore.

9. "Raise More Ringneck Pheasants, and Release Only Cocks in the Fall, Immediately Preceding and During Week-Ends of the Open Season. Retain and Protect All the Hens for Release in the Spring With Enough Cocks to Produce Maximum Natural Propagation, and to Increase the Shootable Supply."

As a broad experiment in an effort to determine the effectiveness of this plan, the southeastern and northwestern sections of Pennsylvania are being stocked on this basis. If it proves successful as it should, there is little doubt but what the entire State will receive the benefit of this program after this year. We believe it is an important step in the right direction and that it will eventually pay dividends through increased pheasant population and better pheasant hunting.

10. "Strengthen and Improve Predator Control Work in Every Way Possible."

Any change to strengthen and improve predator control work is almost certain to prove highly controversial. More than one change may be doubly controversial. Nevertheless, we are trying to do a real job of predator control. First, in an effort to determine the practicability of hiring trappers to control predators, several expert trappers were employed over a period of several months—long enough to realize that we cannot afford that type of system. It is being discontinued because the costs are prohibitive in comparison with the results obtained. Then, the Commission, after careful study and in an effort to spend its funds more wisely decided to remove the bounty from the red fox and to increase the bounty on the goshawk and great-horned owl to the limit of the law. These changes have been made to create incentives to control better the believed most harmful predators through the bounty system, to permit the control of other predators by sportsmen and our own trained personnel, and to utilize the savings for providing food



Here are thousands of pheasants at an exclusive "hen" party. These female ringnecks are being held for spring release in huge pens located near Mt. Gretna as part of the Commission's new release program.

and cover as natural protection for wildlife against predators. In conjunction with these efforts, there is planned an intensified predator control program on the part of our field employees. In other words, we are trying several kinds of medicine to find a cure for the predator problem—aggressive cooperation of the sportsmen in killing predators is a pretty good bet that hasn't been given a fair trial. It should work and may be the answer to our problem.

11. "Develop an Extensive Food and Cover Program For Our Wildlife, in Which Both the Commission and the Sportsmen Will Share the Responsibilities."

Food and cover in the parlance of legislators sportsmen and wildlife management people have become a lot more popular and about as inseparable as Siamese twins. "Bring back the natural habitat and Nature will quickly restore her balance in wildlife" is heard from many quarters. Assuming that food and cover is the answer to our problem, then Pennsylvania is well on her way to accomplishing a real wildlife restoration program.

When the 1949 Legislature approved a resident license fee of \$3.15, it earmarked \$1.25 of each such license for specific purposes, principally for food and cover. We are not wasting words on food and cover, but instead we are packing a lot of action into a comprehensive statewide program under an equitable formula of distribution that will give big and small game hunters and every section of Pennsylvania a fair share of the money and results. In the distribution of the funds, State Game Lands, Cooperative Farm-Game Lands and resident hunters are factors in establishing the most equitable and effective program that we have been able to devise. When I think of providing food and cover for the wildlife all over Pennsylvania, my mind carries me back to the days in grammar school when we sang "Grandmother says in her quaint old way—world wasn't made in a day—a day." No—the job will not be done in a day—a month—or a year, but we are pushing forward and showing results from the very beginning. Surely our future is bright!

Last February you heard the words that announced the program with its eleven points. Since then there has been a lot of work and action. Today we have the results. What has been accomplished thus far is an incentive for much greater and better performance in the future and as Captain Andy of the Show Boat used to say, "It's only the beginnin' folks—only the beginnin'."

If those things were all that we had accomplished during the last eight months we could be reasonably proud—but far more than that—because we have been thinking, planning, working and doing many things that weren't mentioned in the eleven-point program.

For the next few minutes I want to tell you about some things that should warm the heart of every sportsman of the Keystone State and give you new courage and hope.

First—When the Game Commission and the United States Forest Service signed the cooperative agreement last July to work together on a wildlife restoration program in the Allegheny National Forest, it meant practically the equivalent of adding half a million acres to the State Game Lands—an extensive area that will always be open, developed and improved for public hunting. The Commission is planning an extensive food and cover program for this area in the firm belief that much of this so-called big game area can become a big and small game hunters' paradise. No greater piece of good fortune ever visited the hunters of Pennsylvania than the result of those diplomatic negotiations.

Second—Rabbit Farms—Did you ever hear of them? Well, you'll be hearing a lot about them from now on, because the Commission is planning a network of cottontail rabbit farms in every section of Pennsylvania which will be just what their name signifies. Farms—which will serve as small game refuges, where rabbits should thrive, be trapped, and distributed to points where stocking is required. And the farmers will be paid for every rabbit trapped and turned over to a game protector. It is our best assurance that we can obtain an adequate continuing supply and a definite assurance that we will be stocking healthy local Pennsylvania bunnies. Further, it's the best insurance that there will long be rabbit chases, music of the hounds, and sport from that little cottontail who furnishes more real pleasure to more hunters than any other kind of game.

Every farmer cooperating will be given the opportunity to raise day-old ringneck chicks on the same basis as farm-game cooperators now raise them.

Third—Educating Wild Turkeys—Sounds silly, doesn't it? While our wild turkey program in Pennsylvania has produced phenomenal results, we feel that we can do better and put more and wilder turkeys in the woods.

The trouble in the past has been that the young tom released in the fall has not had sufficient schooling to find food for himself and has not been smart enough to protect himself, so many of them didn't grow up. In the future, these young toms will be transferred from the turkey farms to large fenced areas in typical turkey habitat where they will be given reasonable protection, some food, a good chance and sufficient time to grow up and become smart gobblers.

We believe this move is just good common sense. It should produce more and better turkey hunting in the future.

Fourth—Nesting Islands—That's not exactly familiar terminology but it means small patches of cover where pheasants and quail can hatch their chicks.

The most serious problem facing the ringnecks and quail is locating a nest at a place where the mowing machine will not destroy the nest, kill the mother, or both. In some cases as high as 70% of the pheasant nests have been destroyed by the mowing operation and especially in alfalfa and clover.

How do we propose to reduce this mortality?

Offer each farmer or landowner \$1.00 for each inhabited pheasant or quail nest he locates and permits some cover to remain for protection, so the eggs can be hatched.

As an additional incentive for the farmers, it is suggested that local sportsmen's clubs or associations match the State's dollar or add something to make the program

more worthwhile for the local farmers. Some way of preventing the mass slaughter of pheasants and mass destruction of their nests must be found if natural propagation is to be reasonably successful. This plan is worthy of a trial because there is everything to gain and little to lose.

Fifth—Doubling the Day-Old Pheasant Chick Program—As a means of greatly increasing the day-old pheasant chick program practically doubling the present program—it has been decided to give farmers, who can qualify, the opportunity to raise day-old chicks on the same basis as farm-game cooperators. It is hoped that approximately 200,000 chicks will be distributed next year instead of the present approximately 120,000 and to even expand the program in the future.

These plans and programs represent typical thinking and progress in our efforts to do a better job at less cost. Other ideas are taking form, but time will not permit even mentioning them today.

To me, it would seem ungrateful if we were to take credit for our progress without acknowledging the help and cooperation of others who have made these successes possible.

To Governor Duff and the Governor's Office, as well as the Executive Board, go our thanks for the favorable consideration of many suggestions and recommendations approved which made our progress possible.

To the Pennsylvania Fish Commission, we acknowledge with sincere thanks the wholehearted cooperation at all times, and in all ways.

To the Department of Forests and Waters, we acknowledge with much appreciation the offers of cooperation and help in connection with the feeding of game and supplying nursery stock needed in our food and cover program.

To the Department of Military Affairs, we acknowledge with thanks the offer to assist in the feeding of game and to be of service in every way possible.

To the fiscal officers, the Auditor General and State Treasurer, go our thanks for approval of changes which have resulted in a simpler handling of our accounts.

To the representatives of the U. S. Soil Conservation Service, warm thanks for your cooperation and efforts toward integrating wildlife restoration with soil conservation.

Sincere thanks to all others who helped in any way, and especially the farmers and landowners who hold the key to the continuance of the American way of hunting.

To all sportsmen, and particularly to the Pennsylvania Federation of Sportsmen's Clubs, our sincere thanks for your cooperation and help in many ways. May our efforts ever be welded in constructive effort for the benefit of our wildlife—the sportsmen and the landowners of this great Keystone State.

We can plan our work, talk about our successes, thank everybody for their cooperation and help, yet forget the little old lady who controls our destiny. So as we say thanks to the others, let us never forget the one on whom we must always depend so much—Mother Nature. During the last year she has been very kind to us and helped us immeasurably. So let's help her with her work and not forget to thank her from the bottom of our hearts!

* Address to the Pennsylvania Federation of Sportsmen's Clubs in the Forum, Harrisburg, Pa., October 15, 1949.



Commission Plans Cottontail Rabbit Farms

At its meeting in October, the Pennsylvania Game Commission authorized a new program designed to insure the Commonwealth's cottontail rabbit population.

Here is the Commission's plan: First, establish experimental rabbit farm-refuges in natural habitat in eight counties strategically located over the Commonwealth to test the advisability of later developing the project state-wide. Following a successful trial period, the maximum goal is the equivalent of one such rabbit area for each of the Commonwealth's 1574 townships. Some townships will not have areas possessing the necessary habitat available. In such cases additional rabbit farms may be established in neighboring townships where conditions

are favorable. The prospective rabbit farm areas will be carefully selected. The emphasis will be on quality rather than numbers. Such areas are to be chosen with a view toward as much permanency as possible.

It is anticipated that most of these rabbit farm-refuge areas will be located on private property. The Game Commission agrees to pay participating farmers \$1.00 for each healthy rabbit they trap and turn over to the Game Protector for distribution. The plan, in general, is to release rabbits in the township in which the area is situated, thus retaining the local interest. The Commission will furnish advice on habitat improvement and instruction on predator control to farmers who take part in this program, and rabbit box traps will be loaned to them.

The Game Commission feels that spending one hundred thousand dollars or more with Pennsylvania farmers for good, healthy Pennsylvania bunnies would be a great incentive to them to take a material interest in wildlife conservation. The hunters' money could hardly be spent more properly than with the class of people who provide most of the land on which hunters pursue their sport. It is believed that many farmers will see in this plan an opportunity to raise an additional paying crop—a wildlife crop—often on previously unproductive acreage.

As a result of this program, rabbit hunters vision a greatly improved sport. Aggressive sportsmen will welcome the opportunity to cooperate in bettering the supply of this popular game animal. Many realize that the value of rabbits bought from other states in the past has been more psychological than actual. They realize, too, that along with increasing the supply of natural food and the amount of natural protective cover, the rearing and stocking of Pennsylvania bunnies is a logical project that will pay dividends.

This rabbit farm program is a big, pioneer undertaking that has a future. Great care will be exercised in selecting natural habitat locations. Each one will be treated as a separate development problem. Once established, three areas should go a long way toward making Pennsylvania self-sufficient in the matter of a source of supply for rabbit restocking.

Active programs such as this cause sportsmen's clubs to thrive. It is anticipated that when the plan has proven itself and a search is made for additional natural propagating areas, the hunting fraternity will help to find, protect and improve these areas. In this case the fruit of the participating sportsmen's efforts will be at their back doors for them to enjoy. It would seem that if cooperation and initiative are shown by those who would profit most the program will certainly be a success.

LOOKING BACK—from Page 19

ing; treat it with respect at all times.

While you traveled around the state before the season, did you contact land-owners and ask permission to hunt the coming season? That is the time it should be done. Make notes of these good places and make plans early and your gunning season will be a greater pleasure and you will make many new valuable friends in so doing.

When your dog pointed the season's first game, did you rush to him in reckless abandon thus showing your dog you had no confidence in him, or did you walk in slowly and deliberately, carefully studying the prospective line of flight of the bird? Go over the season and try to remember how many times you missed by being in too much of a hurry.

When you scored on game, was your dog allowed sufficient time to find and retrieve a dead or wounded bird? Hunters hate to lose a cripple; so do all real sportsmen. The difference in the two attitudes may be that the sportsman will stay there long enough to give the dog plenty of time to do his work. We cannot continue to enjoy our bird hunting unless we cease leaving cripples in the woods and thickets. Be sure to praise the dog when he finds dead game. He has earned it.

On dry, warm days did you take your dog to water occasionally, and during the timeout periods, did you examine him closely for

burrs in his feet, seeds in his eyes, or any irritating vegetation in his coat?

Did you take a good chance of spoiling all your good training by shooting a rabbit where your bird dog could see it? If you want him to be a rabbit dog that was the thing to do, but if you are a bird man and enjoy top field performances, then make a strong resolution to stop the folly of shooting rabbits over him.

Did you let a bad day ruin your disposition and cause you to unjustly punish a good dog? It is always good to remember there are days when scenting conditions are poor, and there are days when the dog may feel bad due to some minor irritation, loss of sleep, or food that may not have agreed with him. Handle him properly with kindness and patience and he will reward you with many days that are magnificent.

Was your entire hunting season spent in the field without a dog or with some other fellow's dog? This is the right time of year to purchase a good puppy or started dog, so that you will be better equipped to take advantage of additional thrills next season.

Were you courteous and thoughtful with your hunting partners during the season? Did you make new fast friends and show yourself to be a fine sportsman? Take a careful look over your sports log and recall all the changes you want to make for next season; then go to work in earnest to improve on your fine art of upland game gunning.

DIARY OF A SMALL GAME HUNTER—from Page 13

Coming inside they made themselves at home while I finished my work. We exchanged ideas on the following day's hunt, then went into town as I had to pick up some supplies.

Monday, November 15—Cool wind and partly cloudy was the order of today. About seven-thirty, Vernon arrived with the dogs. Vern works for the Department of Forests and Waters and is an ardent sportsman. I get a big laugh watching him bob along with his knee boots clapping and his pipe belching forth an ominous odor which is his own mixture. Locking up the cabin, we ambled off. The first sweep through the clover field produced nothing. Neither did the second or third.

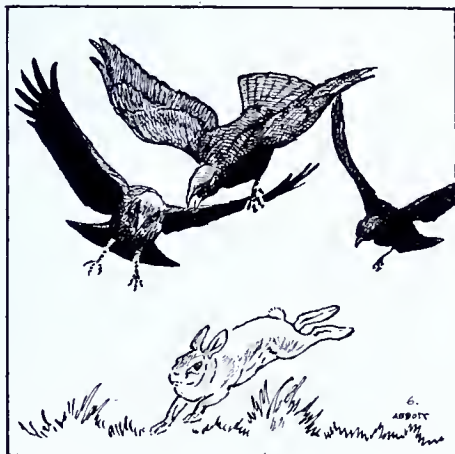
We hunted over many acres, but found no rabbits. At noon Vern was ready to give up as he had to go into town. The fact that I saw only one grouse gave me cause to quit also. Finishing dinner I went to work on the remainder of a big locust tree. Finally, about three-thirty, I decided to take a crack at the squirrels. It is amazing how many grouse or other game a fellow will see when the season is closed. Not to mention the number of legal deer you will see in small game season.

The afternoon passed into evening and no squirrels. Coming in, several grouse flushed . . . all easy shots. And each shot would be a chance of losing your license and putting a black mark on your record.

No thanks, I think more of my record and my right to hunt than to risk it by willfully and knowingly violating regulations. To be sure, there is a lot of it done and a lot of it gotten away with. But, sooner or later they catch up with you. Then there is your conscience to reckon with also.

Actually, you are not cheating anyone but yourself. For every piece of game you take illegally, or over the limit, is just one more shot you will not get next season. Or, if you really want to figure right, it would be shots you would not get. Because you must take into consideration the number of young that game would have produced. Remember my little phrases: "Violation means Annihilation" and "Hunting Clean means Shooting Keen."

If every hunter had to be a Game Protector for a few months, I am quite sure he would soon cultivate his knowledge of laws and regulations.



Thursday, November 25—The dawn was clear and frosty again and I wasted no time in getting the cabin warm and rustling up breakfast.

Before breakfast was cooked, I went out to get a fresh bucket of water. The pump was frozen as usual but a little warm water fixed that. It was when I was returning with the bucket of water that I heard the crows raising a commotion down the road.

Listening, I soon knew what was going on and picked up the .22 rifle and made tracks for the sound. Going only a short distance I soon saw them sitting around a big owl in a tree.

However, all my efforts to get a shot were futile as the owl kept flying to a new location just as I would get in position to shoot.

This would be a fine morning for squirrels, I thought, as I finished breakfast. But not wanting to be away when my folks arrived, I stuck around.

Friday, November 26—Getting up at nine o'clock, my breakfast was ready and I did not have anything to do, but I would rather have been in camp.

Spent the day taking care of business matters and right after supper got ready to go back to camp. About 6:45 Bill Dodson stopped for me and we were off again.

We were going to "The Old Tannery" which is the camp to which Mr. Dodson belongs. When Bill Dodson, Bill Runk and myself arrived, we were greeted by Russell Shuttleworth and his dad. We were unpacking when Mr. Dodson and Charles arrived to complete our party. Russ had his usual pot of mush cooking on the back of the stove and when he saw us all coming in the door, he yelled to his dad to grab a bed as an army was moving in.

Saturday, November 27—The alarm failed to go off and L. L. Bean, as we call Charles because of the fact that he is outfitted from head to foot with their equipment, routed us out of bed. We headed for the kitchen and started the fires. Before long the entire crew was in the kitchen.

Breakfast was prepared by Russ who is a good chef. Meanwhile Charles and I made the lunches for some of the gang. We split up after breakfast. Charles and I decided to hunt rabbits until noon with Russ and his dad.

Bill Runk and Mr. Dodson and Bill went over the mountain to the other valley to hunt squirrels. No sooner had they pulled out than we also left, heading for the rabbit country.

It was a clear, frosty morning and the rays of the sun streamed across the mountains and valleys in a friendly manner, melting the frost and warming the air. Before long a strong gusty wind roared across the valleys from the north and it grew a little, cooler.

We stopped at our first point, which was a pine hill that had been timbered off and had a lot of brush piles laying about. It was an excellent spot for rabbits.

We worked out the hill but didn't put any rabbits out. On the way back to the cars



we put out one rabbit but no one got a shot at him. Taking the trail, the dogs led us to a groundhog hole. "Looks like another one for next season" said Charles.

Getting in the cars, we headed for another good spot. We parked and began hunting, and hunt we did, but to no avail. Looking at my watch, I reminded Charles that we had better start back as it was 12:00 and we wanted to go on the big mountain for squirrels.

We said "so long" to Russ and made tracks. We were hungry as hounds when we reached the car. The lunches were rather small so we stopped at a little store.

After putting away some ice-cream, cakes, soft drinks, candy, and sandwiches, we felt refreshed once more. We pulled in at my camp and parked. Checking the dams and the work I had done in the previous weeks, we started for the mountain.

We had gone only a short way when Charles suggested we walk through an old abandoned field in hopes of putting out a rabbit. Hardly had he said it when out one hopped. Bang, and down he went.

As Charles picked up his rabbit, I said, "Well, it looks like you guessed this one right." We continued on our way until we were well in the woods. One more knoll remained for us to climb when Charles motioned for me to stop.

Looking ahead, I saw a big doe bound away from us. She stopped at the top of the rise and turned broadside to us. We stood perfectly still and she stood watching us for some time trying to wind us.

When we moved on, she walked off watching us suspiciously. It was still windy and I didn't expect to see any squirrels as long as it kept blowing. Telling Charles where to go, I took my position on my old stump.

We waited for over an hour but the wind grew worse and no signs of squirrel were seen. Finally, we decided it was no use so we started back to the car.

Several grouse flushed as we walked down the old timber trail. We reached the car at five o'clock and met the others at camp. They had bagged a few squirrels. Russ and his dad, however, missed two rabbits.

We went to sleep that night with a clear conscience, knowing that we had left enough seed for the next season.

Thus ended my wonderful season in the mountains, during which time I learned much woods lore and took only the game I needed.



Even Equipment Doesn't Pay

In the Averyville section of Elk County at 9:40 p.m. on the evening of August 4th, Game Protector Daniel E. Russ of St. Marys apprehended Alfred Meyer of St. Marys while Meyer was attempting to take or kill a deer.

Out-of-season deer hunters are all too common these days but it was the equipment Meyer carried that makes his case exceptional. He was literally "loaded for bear." His paraphernalia included: a .32 caliber Winchester Special carbine equipped with a 3-cell flashlight on a home-made side mount, a sling made from a clothes line, a knife in a home-made sheath, a hand-forged meat saw, a bottle of water, a carbide head lamp, blood-stained gunny sacks, heavy paper, and a canvas pack to which had been fastened leather shoulder straps.

The complete equipment, even though somewhat crude, would seem to indicate that this was not the lawbreaker's maiden voyage in the realm of deer slaying. He was prepared to kill a deer and skin out and transport choice portions of vension from the scene of the crime.

P. S.—Mr. Meyer paid the usual fine of \$100 plus \$3.50 costs before a St. Marys Justice of the Peace. He has learned like many others that even with careful preparations, those who persist in stealing from true sportsmen ultimately finish losers with the law.

THAT DEER RIFLE—from Page 19

yard shot. This may explain some of those impossible shots you hear about.

Two jokers that confuse the average hunter are muzzle velocity and muzzle energy. He takes these figures as his gospel. His ideas are vague, however, as to what happens to muzzle velocity and energy out where the game is. Many a bullet starts out like a fire horse and winds up way out yonder, clear out of breath. What he never realizes is that these figures are for comparison only in relation to other ballistic computations and to determine the effectiveness (or lack of it) of a particular load in a given cartridge. Initial velocity is a great factor in the hitting and killing qualities of a given load. The big factor, however, is the bullet. The weight, shape of the bullet, sectional density, wind and altitude determine the rate of loss of velocity. When velocity dies, so does killing power. Therefore in choosing a cartridge it is wise to pick it for the average ranges that you will shoot your game.

Now let's get down to cases and see what we must have in a deer rifle. First, let's take up accuracy. If we are to be successful, we must be able to place our shot reasonably close to our aim. The size of the target and the size group that our rifle will shoot determines the distance that we can hit. For general purposes we can group accuracy in two classes. First we have match or vermin accuracy which runs from one to two minutes of angle per hundred yards. A minute of angle means one inch per hundred yards in riflemen's jargon.

Second we have hunting accuracy. This is generally placed at three minutes of angle. This will figure out a three inch group at one hundred yards and six inches at two hundred. This is about twice the size of the palm of your hand. Practically all of our modern sporting rifles and ammunition will do this within hunting ranges. There are several bolt action sporting rifles that will give match accuracy with the right ammunition but you pay for accuracy with weight.

The next thing that pops up is the question of range. What is the average range at which deer are shot in Pennsylvania? Of course there are various types of country found in our deer range. Some are mighty hollows where you can see great dis-

tances. There are stretches where visibility is extremely limited. My own country contains a combination of these two conditions. I have on occasion picked up a deer at eight hundred to a thousand yards with the binoculars but it takes big antlers and ideal light conditions to pick up a buck at these ranges, even with the best of glasses. Even then it does you little good, for those animals are too far off to shoot and for too many hunters, too far off to even try a stalk. So let's take a look at the note book which has well over a hundred kills in this varied country. They start to make a picture of what you may reasonably expect.

The first hundred deer averaged exactly sixty-six paces to where they were first hit. There were just three that exceeded two hundred paces—one at 247 paces, one at 326, and one at 376—but the great bulk of them were under a hundred. The closest was three feet. I might state here that these men were all cool, experienced hunters. In a good many cases deer were coming toward them and they let them come.

The most valuable facts that stand out are as follows: There is no substitute for good shooting. Any rifle sighted in at 150 yards that gives a midway trajectory of three inches will do the trick. Such a gun will shoot from three to five inches low at 200 yards. Add 1500 pounds muzzle energy and you have a deer rifle. A gun is no better than its handler.

But here are a few ideas of my own that I want in my deer rifle. The first is what I term "pointability." It's an elusive quality and hard to describe. It's not fit and it's not balance but a combination of both. It's like a fine single barrel custom-built trap gun. You see the target, the gun flies right to your shoulder and is right on or near your mark. The old light weight 86 Model Winchester three quarter magazine .33 caliber is a perfect example. There are others, of course.

The other third that I demand in my deer rifle is light weight. You never see it in print but the sad truth about this deer game should be told. It's ninety-nine and nine-tenths per cent carrying a gun and one-tenth shooting. The way a gun picks up weight in rough country is amazing. So, today, my deer guns have short barrels for fast swinging in the brush. There are no over-stuffed forearms or cord wood stocks. The gun weight is 6½ to 7 pounds. It keeps me fresher—longer.

So you take yourn' and I'll take mine and we'll meet at the end of the road and tote 'em in together!

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of September, 1949

ALLEGHENY—\$130.00

Bartolozzi, Armand M., 1428 Meldon St., Donora. Using an auto as a blind from which to kill game \$ 25.00
Gallias, Steve, R. D. No. 3, Elizabeth. Hunting without resident license 20.00
Kimbo, Howard Edward, 2803 Vera St., Pittsburgh. Loaded rifle in vehicle standing along highway 10.00
Koegler, John, Warrendale. Failure to show hunter's license on demand of officer 20.00
Pringle, Henry Francis, Box 81, Warrendale. Hunting game on Sunday; Failure to show hunter's license on demand of officer 45.00
Schneider, Bella E., R. D. No. 1, Bridgeville. Dog running game unaccompanied by owner or handler 10.00

ARMSTRONG—\$50.00

Schiano, Ralph, R. D. No. 3, Kittanning. Alien possessing one rifle and one shotgun 50.00

BEAVER—\$25.00

McCawley, Clyde Andrew, 130 Mounds St., Fair Oaks. Dumping rubbish on State Game Lands 25.00

BEDFORD—\$100.00

Miller, Dayton Alfred, R. D. No. 1, Schellsburg. Killing one deer in close season 100.00

BERKS—\$20.00

Howe, Joseph Irvin, 116 Second Ave., West Reading. Hunting without resident license 20.00

BLAIR—\$305.00

Berkley, Kenneth Myron, Newry. Hunting without resident license 20.00
Detwiler, Robert Clyde, 1307 6th Avenue, Duncansville. Carrying loaded gun in car in motion along highway 25.00
Michaels, Chester J., 318 E. 10th St., Tyrone. Aiding and assisting in the killing of 3 raccoons in close season 50.00
McMullen, James Walter, 1108 Woodland Ave., Tyrone. Aiding and assisting in the killing of 2 raccoons in close season 50.00
McMullen, Samuel Lee, 1317 Blair Avenue, Tyrone. Aiding and assisting in the killing of 2 raccoons in close season 50.00
Shingler, Carl, 108 Allegheny St., Tyrone. Possessing parts of deer taken in close season 100.00
Stern, Jacob Kensinger, Jr., R. D. No. 1, Roaring Spring. Setting one trap in hole 10.00

BRADFORD—\$120.00

Coats, Robert Lee, Powell. Hunting without resident license .. \$ 20.00
Keeney, Burton L., R. D. No. 1, Sugar Run. Possessing parts of deer taken close season 100.00

CAMBRIA—\$50.00

McCleester, Jr., Percy Albert, Box 1481 R. D. No. 2, Johnstown. Possession of parts of ringneck pheasant hen taken in close season 25.00
Match, Frank, Box 291 Lloydell. Depositing rubbish on State Game Lands 25.00

CARBON—\$125.00

Pastucha, William P., 40 W. Water St., Summit Hill. Killing doe deer in closed season 100.00
Snyder, Leroy, 40 W. Walter St., Summit Hill. Possessing loaded rifle in vehicle in motion along highway 25.00

CENTRE—\$540.00

Fye, Reland George, Meshannon. Killing deer doing damage to crops and removing same from property 100.00
Kitchen, Jr., Robert Harvey, R. D., Beech Creek. Possessing loaded rifle in vehicle in motion along highway; Attempting to kill deer in close season; Hunting while hunting rights have been denied 165.00
Meyer, Albert Earl, Centre Hall. Dogs chasing small game unaccompanied by owner 10.00
Phillips, Ray Harold R. D. No. 1, Howard. Hunting while hunting rights have been denied; Attempting to kill a deer in close season 140.00
Ripka, Jr., Clyde, William, Burnside St., Bellefonte. Killing a doe deer during close season 100.00
Schnarrs, Walter Pershing, 502 Hemlock St., Philipsburg. Possessing unloaded shotgun, not securely wrapped in vehicle in motion along highway between 8:30 p. m. & 5 a. m. 25.00

CHESTER—\$40.00

Easton, Edward Alfred, R. D. No. 1, Coatesville. Hunting without resident license 20.00
Easton, Preston Isaac, R. D. No. 1, Coatesville. Hunting without resident license 20.00

CLARION—\$545.00

Bouch, William H., R. D. No. 1, Sigel. Transporting parts of three illegal killed deer 300.00
Hollisbaugh, William E., Mayport. Assisting in killing deer in close season 100.00
Kifer, Fred L., R. D. No. 2, Knox. Hunting without resident license 20.00
Orr, Charles D., R. D. No. 2, Knox. Possessing part of raccoon in close season; Possessing parts of deer taken in close season 125.00

CLEARFIELD—\$200.00

Beatty, Melvin LeRoy, P. O. Box 13, Luthersburg. Possessing a shotgun in vehicle not securely wrapped in motion along highway between 8:30 p. m. & 5 a. m. 25.00
Hendricks, Theodore Cleatus, Rockton, possessing parts of deer taken in close season \$ 100.00
Welker, Frederick Raymond, R. D., Woodland. Possessing loaded rifle in vehicle in motion along highway 25.00
Welker, Irvin Charles, R. D., Woodland. Possessing loaded rifle in vehicle in motion along highway 25.00
Woodland, Raymond Burton, R. D., Woodland. Possessing loaded rifle in vehicle in motion along highway 25.00

CLINTON—\$100.00

Tripp, John R., Shintown, Renova. Killing a spike buck deer in close season 100.00

CUMBERLAND—\$40.00

Foster, Elvin Iradel, 11 Manor Ave., S. Enola. Hunting without resident license 20.00
Keller, David Cyrus, 617 Camp St., Harrisburg. Hunting without resident license 20.00

DELAWARE—\$210.00

Buckley, Louis Elmer, 13 Beverly Ave., East Lansdowne. Hunting without resident license 20.00
Du Hadway, John Joseph, 527 Cypress St., Yeadon. Possessing deer unlawfully taken 100.00
Hubert, Jr., John Stanley, 48 Seward Lane, Green Ridge. Hunting without resident license 20.00
Kacprzycki, Henry Raymond, 2532 W. 6th St., Chester. Hunting without resident license 20.00
Piscott, Carl Richard, 7 Plush Mill Rd., Media. Possessing loaded shotgun in vehicle standing along highway; Hunting without resident license 30.00
Weare, John Joseph, 17 Allen St., S. Media. Hunting without resident license 20.00

ELK—\$398.00

Himes, John Burton, Grant Road, Ridgway. Possessing parts of deer taken in close season 99.00
1 day
Prechtl, Albert Allen, Daguscahonda. Killing doe deer in close season 100.00
Prechtl, Frederick Michael, Daguscahonda. Possessing parts of a doe deer in close season 100.00
Zuchowski, Edward, Grant Road, Ridgway. Killing doe deer in close season 99.00
1 day

ERIE—\$45.00

Bingham, Robert J., 424 8th St., Erie. Possessing loaded rifle in car in motion along highway 25.00
Simpson, Carl G., 1317 E. 34th St., Erie. Hunting without resident license 20.00

FAYETTE—\$60.00

Colabianchi, Roland, 1525 2nd St., Brownsville. Training dogs while carrying shotgun 10.00
Neighbors, Merle Lloyd, Box 196, Point Marion. Hunting without resident hunting license 20.00
Petak, Joseph Thomas, Box 196, Point Marion. Hunting without resident hunting license 20.00
Price, Floyd Earl, R. D. No. 1, Smithfield. Training dog while carrying .22 rifle 10.00

FRANKLIN—\$20.00

Cunningham, James Arthur, 402 Wayne Ave., Chambersburg. Hunting without a resident license 20.00

FULTON—\$10.00

Seville, Floyd David, Fort Littleton. Possessing a loaded rifle in vehicle standing along highway 10.00

GREENE—\$75.00

Fuddla, Andy Mike, Box 167, Carmichaels. Disturbing two traps of another 50.00
Lemmon, Guy Vernon, 714 E. Greene St., Waynesburg. Dumping rubbish on State Game Land 25.00

HUNTINGDON—\$140.00

Newder, Clyde, Robertsdale. Hunting without a resident license 20.00
Paden, Cloyd Bernell, R. D. No. 1, Petersburg. Interfering with State Officer in performance of duty 100.00
Snyder, John Andrew, R. D. No. 1, Robertsdale. Hunting without resident license 20.00

INDIANA—\$75.00

Oakes, Ray Daniel, 452 Water St., Indiana. Dumping rubbish on State Game Lands 25.00
Stanek, John, R. D. No. 1, Homer City. Possessing two raccoons without a permit 50.00

JEFFERSON—\$517.00

Biose, Robert E'ton, R. D. No. 2, Reynoldsville. Attempting to kill deer in closed season 87.00
13 days

Coon, John Everett, R. D. No. 1, Sigel. Attempting to kill deer in close season; Hunting game between 5 p. m. & 7 a. m.; Hunting without resident hunters license 135.00
Damore, Philip, Stump Creek. Shooting within 150 yds. of occupied building 25.00

Eshbaugh, William Climpson, R. D. No. 1, Baxter. Possessing loaded rifle in vehicle in motion along highway 25.00

Frost, James Merrel, R. D. No. 1, Sigel. Attempting to kill deer in close season; Hunting game between 5 p. m. & 7 a. m.; Hunting without residents license 135.00

Shovestull, John Allen, Maple St., Brookville. Training dog on game while carrying rifle 10.00

Wyant, Joseph Miller, R. D. No. 2, Brookville. Possessing parts of deer taken in closed season 100.00

JUNIATA—\$10.00

Varner, Ira Leon, R. D. No. 1, McAllisterville. Possessing one live squirrel taken in close season 10.00

LACKAWANNA—\$20.00

Williams, Wayne Paul, Beech Crest, Clark Summit. Hunting without a resident license 20.00

LAWRENCE—\$45.00

Mills, Milo T., R. D. No. 2, New Castle. Entering State Game Refuge 25.00
Sines, Wayne U. Jr., 115 High St., Warren Ave., New Castle. Hunting without a resident license 20.00

LEBANON—\$20.00	
Rittle, Ralph Earl, 545 N. 9th St., Lebanon. Hunting without resident license	20.00
LEHIGH—\$100.00	
Baranek, Alfred Joseph, 416 Hill St., Allentown. Entering State Game Refuge with firearm	25.00
Schmidt, Lewis George, 1342 Chew St., Allentown. Entering State Game Refuge with firearm	25.00
Wascoe, Richard Francis, 131 N. Jefferson St., Allentown. Entering State Game Refuge with firearm	25.00
Weaver, John Alfred, 31 N. Poplar St., Allentown. Entering State Game Refuge with firearm	25.00
LUZERNE—\$70.00	
Cherescavich, Alfred M., 564 James St., Hazleton. Hunting without resident license	20.00
Klem, Nicholas, 155 Wilson St., Larksville. Killing woodchuck with automatic firearm; Hunting without resident license	30.00
Wallace, Frank R., 56 Yeager Avenue, Forty Fort. Hunting without a license	20.00
McKEAN—\$120.00	
Hazard, Howard Bernard, R. D. No. 1, Bradford. Possessing parts of deer taken in closed season	100.00
Jackson, Raymond Gaylord, 24 Mill St., Port Allegany. Hunting without resident license	20.00
MERCER—\$20.00	
Mills, Wilmer F., R. D. No. 4, Greenville. Hunting without resident license	20.00
MIFFLIN—\$65.00	
Bowersox, Joseph Emerson, 707 W. 6th St., Lewistown. Possessing unloaded rifle not securely wrapped in vehicle in motion between 8:30 p. m. and 5 a. m.	25.00
Downing, Walter James, Harvard St., Lewistown. Dog chasing and killing rabbit in close season	15.00
Miller, Max, 729 W. 6th St., Lewistown. Possessing unloaded rifle not securely wrapped in vehicle in motion between 8:30 p. m. & 5 a. m.	25.00
MONROE—\$100.00	
Siglin, Stanley A., Cresco. Killing doe deer in close season	100.00
MONTGOMERY—\$115.00	
Bianco, Peter, Church St., Conshohocken. Killing 2 wild ducks in closed season	20.00
Blonsky, Joseph John, 216 Bullock Ave., West Conshohocken. Attempting to kill 2 wild ducks in closed season	20.00
Cawley, Edward, Perkiomenville. Failure to display license tag while hunting	20.00
Durchsprung, Herbert Cameron, 28 W. Mill Road, Flourtown. Possessing ringneck pheasant in closed season	25.00
Smith, Lula Bee, 628 Lincoln Ave., Pottstown. Dog chasing small game in close season	10.00
Weirman, Henry Johnson, R. D. No. 1, Schwenksville. Failure to display license tag while hunting	20.00
MONTOUR—\$10.00	
Brady, Charles Henry, Jr., 110 Fulton St., Danville. Training dog on Sunday without consent of landowner	10.00
NORTHAMPTON—\$55.00	
Amadore, Jr., Peter John, 145 Spring St., Nazareth. Hunting without resident license	20.00
Bianchini, Charles Clayton, R. D. No. 4, Bethlehem. Shooting pheasant in closed season	25.00
Kaimar, Joseph, 1163 Fortuna St., Bethlehem. Shooting at dove in closed season	10.00
NORTHUMBERLAND—\$300.00	
Latsha, Melvin Edward, Excelsior. Assisting to conceal game (deer) unlawfully killed	100.00
Madison, Donald William, Excelsior. Killing deer in close season	100.00
Savidge, George Albert, Excelsior. Assisting to conceal deer unlawfully killed	100.00
PHILADELPHIA—\$50.00	
Moffo, John, 2013 S. Beachwood St., Philadelphia. Killing 2 ringneck pheasants in closed season	50.00
PIKE—\$100.00	
Bogart, Marvin Allen, Bushkill. Killing deer in closed season .	100.00
POTTER—\$250.00	
Bratz, James Duane, Crossford, R. D. No. 1. Killing 2 turkeys in close season	50.00
Bratz, Stanley Allen, Crossford, R. D. No. 1. Possessing two turkeys taken in close season	50.00
Miles, Meredith Clifton, Sabinsville, R. D. No. 1. Assisting to kill doe deer in closed season	100.00
Rogers, Franklin Raymond, R. D. No. 4, Coudersport. Hunting without non-resident license	50.00
SCHUYLKILL—\$445.00	
Bretz, Robert Harold, R. D. No. 2, Pine Grove. Assisting to conceal game (deer) unlawfully killed	100.00
Bretz, William B., R. D. No. 1, Pine Grove. Assisting to kill doe deer in closed season	100.00
Forke, Peter, 35 W. Grant St., McAdoo. Using an illegal device to wound a woodchuck	10.00
Haskins, William James, R. D. No. 2, Pottsville. Dog chasing small game in closed season	10.00
Kintzel, Jeremiah Brown, R. D. No. 2, Pine Grove. Killing doe deer in closed season; Throwing artificial light upon deer while in possession of a firearm	200.00
Soltyslak, Charles Casimer, Shade St., Middleport. Killing raccoon in closed season	25.00
SNYDER—\$200.00	
Ettinger, Floyd Pharus, R. D. No. 1, Beavertown. Throwing artificial light upon deer while in possession of rifle	100.00
Keister, Clark Junior, R. D. No. 1, Beavertown. Attempting to kill a deer in closed season	100.00
SOMERSET—\$280.00	
Mandel, Martin, 411 5th St., Windber. Entering special Wildlife Refuge	25.00
Rugg, Albert Ray, R. D. No. 1, Confluence. Possessing unloaded rifle larger than .22 long, not securely wrapped in vehicle in motion along highway between 8:30 p. m. and 5 a. m.	25.00
Sklinar, Michael Albert, R. D. No. 1, Cairnbrook. Attempting to take deer in closed season	100.00
Stahl, James William, R. D. No. 5, Somerset. Possession of parts of deer taken in close season	100.00
Weyant, Lawrence, R. D. No. 1, Central City. Hunting without resident license	20.00
Woy, John Lester, Bowell. Possessing unloaded rifle in vehicle standing along a road open to the public	10.00
SULLIVAN—\$20.00	
Leighton, Lorn A., Wheelerville. Making false declaration of dates to secure bounty on two gray fox	20.00
SUSQUEHANNA—\$75.00	
Bates, William Paul, R. D. No. 2, Little Meadows. Attempting to defraud the Commonwealth through the collection of bounty	25.00
Terkosky, Julius, R. D. No. 1, Susquehanna. Hunting without non-resident license	50.00
UNION—\$25.00	
Hinish, Ellis, 320 N. Third St., Lewisburg. Possessing live raccoon without permit	25.00
VENANGO—\$20.00	
Vogan, Kenneth L., 315 2nd St., Franklin. Hunting without resident license	20.00
WARREN—\$100.00	
Henry, Wade, Youngsville. Possessing parts of deer taken in close season	100.00
WASHINGTON—\$35.00	
Kuffner, Paul, P. O. Box 425, Bentleyville. Possessing unloaded rifle in vehicle in motion not securely wrapped between 8:30 p. m. and 5 a. m.	25.00
Leppa, Charles Theodore, R. D. No. 2, Washington. Loaded shotgun in vehicle standing along highway	10.00
WAYNE—\$25.00	
Bociarski, Witold, R. D. No. 1, Pleasant Mt. Removing sand from State Game Land	25.00
WESTMORELAND—\$45.00	
Molenari, John, 1200 Penn Ave., Jeannette. Shooting within 150 yds. of occupied buildings	25.00
Simms, William Cyrus, Route 1, Latrobe. Hunting without resident license	20.00
WYOMING—\$120.00	
Adams, William Henry, Meshoppen. Hunting without resident license	20.00
Johnson, Gerald Francis, R. D. No. 2, Laceyville. Transporting deer unlawfully killed	100.00
YORK—\$120.00	
Kile, John Raymond, R. D. No. 2, York. Hunting without resident license	20.00
Scheivert, Roy Lawrence, 625 E. Boundary Ave., York. Throwing artificial light upon deer while in possession of firearm	100.00
NON-RESIDENT—\$80.00	
Kelley, Earl Preston, 1120 Beechwood Drive, Hagerstown, Maryland. Hunting squirrels in close season	10.00
Renner, Charles Earl, Hundred, West Virginia. Hunting without non-resident license; killing 2 squirrels in close season ..	70.00

HUNTING LICENSE REVOCATIONS

At a recent meeting the Pennsylvania Game Commission revoked the hunting and trapping license privileges of the following named persons to the dates shown.

ADAMS	
Swisher, Scott, R. D. No. 1, Fairfield. Assisting in the killing of two deer in closed season	Aug. 31, 1951
ALLEGHENY	
Redmond, William P., 112 13th St., McKeesport. Possession of a rabbit taken in close season	Aug. 31, 1951
ARMSTRONG	
Anthony, Ralph E., 1417 Orr Avenue, Kittanning. Attempting to take game (deer) in closed season	Aug. 31, 1951
Craft, Lawrence F., R. D. No. 5, Kittanning. Attempting to take game (deer) in closed season	Aug. 31, 1951
Gould, Floyd P., R. D. No. 1, Rimer. Attempting to take game (deer) in close season	Aug. 31, 1951
BEDFORD	
Emerick, Earl L., R. D. No. 1, Hyndman. Possessing parts of deer killed in closed season	Aug. 31, 1951
Robosson, Charles W., Hyndman. Possessing parts of deer killed in close season	Aug. 31, 1951
BERKS	
Calabrese, Frank, 122 Belvedere Avenue, Reading. Failure to show hunters license on demand	Aug. 31, 1951
Grabiak, George W., 848 Bingham St., Reading. Attempting to shoot or kill woodchuck during close season	Aug. 31, 1950
BRADFORD	
Ackley, Jesse H., R. D. No. 6, Towanda. Possessing live raccoon without permit	Aug. 31, 1950
Johnson, Francis, R. D. No. 6, Towanda. Setting traps for beaver, within 25 ft. of beaver dam	Aug. 31, 1951
CAMBRIA	
Lohr, Clarence D., 337 Crest St., Johnstown. Digging out woodchuck without required consent; Training dog in closed season	Aug. 31, 1950
Morris, Reuben H., R-5 Christopher, Johnstown. Digging out woodchuck without required consent; Training dog in closed season	Aug. 31, 1950
Whip, Percy O., 342 Crest St., Johnstown. Digging out woodchuck without required consent; Training dog in closed season	Aug. 31, 1950

CAMERON

Lewis, Edward G., R. D. No. 1, Emporium. Possessing a male deer taken in close season Aug. 31, 1951

CARBON

Serfass, Stanley, R. D. No. 3, Lehighton. Training dogs in closed season Aug. 31, 1952

CENTRE

Chambers, Howard C., Clarence. Hunting for deer during closed season Aug. 31, 1951

Koleno, George D., Clarence. Hunting for deer during closed season Aug. 31, 1951

Kormanec, Edward S., Clarence. Hunting for deer during closed season Aug. 31, 1951

CHESTER

Arrowood, Robert, R. D. No. 2, Nottingham. Possessing pheasant in close season Aug. 31, 1950

DeHaven, Louis, R. D. No. 2, Nottingham. Hunting without resident license Aug. 31, 1951

Moses, Fred E., R. D. No. 1, Spring City. Failure to report a shooting accident causing injury to self Aug. 31, 1951

Pierce, Austin, Jr., R. D. No. 2, Oxford. Transporting game unlawfully killed Aug. 31, 1951

Pizii, Albert R., 430 Jefferson Ave., Downingtown. Killing a rabbit during the closed season Aug. 31, 1950

Wright, Edward T., R. D. No. 1, Spring City. Failure to report a shooting accident causing injury to another .. Aug. 31, 1951

CLARION

Beichner, Bernard J., Shippenville. Assisting in killing of deer in closed season Aug. 31, 1951

Beichner, Charles H., Shippenville. Possessing parts of an illegally killed deer Aug. 31, 1951

Geery, Raymond, R. D. No. 1, Summerville. Killing deer in close season Aug. 31, 1951

Hinz, Richard A., R. D. No. 1, Clarion. Hunting deer in closed season Aug. 31, 1951

Hummel, Clark H., Fryburg. Killing deer in closed season Aug. 31, 1951

Rieu, Odilon L., Sturgeon. Hunting deer in closed season Aug. 31, 1951

Weaver, Bernard A., Snydersburg. Assisting in killing of deer in closed season Aug. 31, 1951

Weaver, Frank T., Lucinda. Hunting deer in closed season Aug. 31, 1951

Wolbert, Gervase, Snydersburg. Hunting deer in closed season Aug. 31, 1951

Wolbert, Regis, Snydersburg. Hunting deer during closed season Aug. 31, 1951

CLEARFIELD

Berry, James, Kylerstown. Aiding and assisting in attempting to kill a deer by use of artificial lights Aug. 31, 1951

Desmett, Ashley, McCartney. Hunting without resident license Aug. 31, 1951

Hickman, James K., R. D. No. 1, DuBois. Killing a rabbit in closed season Aug. 31, 1951

CLINTON

Giminiani, William, 385 E. Park St., Lock Haven. Attempting to kill a deer in closed season Aug. 31, 1951

Phoeniz, Calvin E., R. D. No. 1, Mill Hall. Attempting to kill a deer in the closed season Aug. 31, 1951

Smart, Paul C., 383 E. Park St., Lock Haven. Attempting to kill a deer in closed season Aug. 31, 1951

ELK

Meyer, Alfred, South Michaels Rd., St. Marys. Attempting to take or kill a deer in closed season Aug. 31, 1951

Nicklas, Jerome M., 562 Chestnut St., St. Marys. Throwing artificial light upon deer while in possession of a firearm Aug. 31, 1952

Nicklas, Lawrence, 618 Center St., St. Marys. Attempting to kill a wild turkey during closed season Aug. 31, 1951

Nicklas, Paul J., 562 Chestnut St., St. Marys. Attempting to kill a wild turkey during closed season Aug. 31, 1951

Schatz, Louis A., Jr., 237 Market St., St. Marys. Possessing unloaded rifle not securely wrapped in vehicle in motion between 5 p. m. and 7 a. m. Aug. 31, 1952

FAYETTE

Pluta, Joseph J., Gibbons Glade. Possessing captive fawn deer Aug. 31, 1951

Shipley, Harry R., Ohioptyle. Failure to produce head of deer upon demand of officer Aug. 31, 1951

FOREST

Elder, Arthur L., Jr., Marienville. Possessing parts of deer taken in closed season Aug. 31, 1951

Heasley, Clarence G., S. Forest St., Marienville. Possessing parts of deer taken in close season Aug. 31, 1951

Hudepohl, John Jr., S. Forest St., Marienville. Possessing parts of deer taken in close season Aug. 31, 1951

FRANKLIN

Angle, Edward P., 685 Broad St., Chambersburg. Assisting in the concealment of one dove unlawfully killed. Loaded rifle in vehicle standing upon a public highway. Hunting without license tag displayed Aug. 31, 1950

Eyer, Garnet A., 741 Broad St., Chambersburg. Aiding and assisting in the concealment of game unlawfully killed.. Aug. 31, 1950

INDIANA

Plavi, Steve E., Dixonville. Using a vehicle to hunt woodchucks Aug. 31, 1951

Spencer, Glenn D., R. D. No. 1, Rossiter. Possessing parts of deer in closed season Aug. 31, 1951

Spencer, Joseph L., R. D. No. 1, Rossiter. Possessing parts of deer in closed season Aug. 31, 1951

LACKAWANNA

Bishop, Roy W., 436 High St., Winton. Attempting to kill a woodchuck in close season; Attempting to will a woodchuck from an automobile Aug. 31, 1950

LAWRENCE

Swesey, Paul D., P. O. Box 463, Ellwood City. Killing a raccoon in closed season Aug. 31, 1951

LEBANON

Bratz, Paul H., 1004 Cornwall Road, Lebanon. Attempting to collect bounty on animal upon which no bounty is authorized Aug. 31, 1952

LYCOMING

Baker, Donald L., R. D. No. 2, Williamsport. Possessing deer taken in closed season Aug. 31, 1951

Koch, Welker L., R. D. No. 1, Jersey Shore. Possessing deer taken in closed season Aug. 31, 1951

McKEAN

Carrow, Frances C., Hazelhurst. Possessing two beaver pelts unlawfully taken Aug. 31, 1951

Carrow, Richard P., Hazelhurst. Possessing two beaver skins unlawfully taken Aug. 31, 1951

Chiodo, Frank, 171 W. Washington St., Bradford. Possessing parts of deer taken in closed season Aug. 31, 1951

Kilcoin, Gilbert I., Brooklyn Side, Port Allegany. Possessing a beaver skin unlawfully taken Aug. 31, 1951

MIFFLIN

Harbst, Paul I., R. D. No. 1, Reedsville. Shooting within 150 yards of occupied buildings; Killing 2 wild ducks ... Aug. 31, 1951

Kline, Charles E., R. D. No. 1, Reedsville. Shooting within 150 yards of occupied buildings and killing 2 wild ducks Aug. 31, 1951

MONROE

Hanna, Silas R., Saylorsburg. Killing one doe deer in close season Aug. 31, 1951

MONTGOMERY

Elmer, Sam William, 2480 Kenerton Ave., Roslyn. Hunting without resident hunters license Aug. 31, 1951

Henderson, Charles, Dresherton. Possessing woodchuck in close season Aug. 31, 1950

PHILADELPHIA

Jackson, George W., 3508 S. 84th St., Philadelphia. Trapping while trapping rights have been denied; Securing hunter's license while hunting rights have been denied . Aug. 31, 1952

Mitchell, Lesley, 2213 League St., Philadelphia. Killing a groundhog in closed season Aug. 31, 1950

POTTER

Bunnell, Willard J., R. D., Ulysses. Killing deer in closed season Aug. 31, 1951

Ferrier, John H., R. D. No. 2, Genesee. Attempting to kill deer in closed season Aug. 31, 1951

Glassmire, Walter N., R. D. No. 3, Coudersport. Transporting parts of deer in closed season Aug. 31, 1951

Hoppe, Frederick J., Carter Camp. Possessing parts of two deer in close season Aug. 31, 1951

Stiles, Clair E., R. D. No. 2, Coudersport. Attempting to kill deer at night with the use of artificial lights Aug. 31, 1951

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DEEP IN THE WINTER WOODS—

from Page 9

certainly aren't favored by bears as so many persons believe.

Regardless of what hunters think about his destructive ways, the red fox is a gentleman when it comes to his home life and he is busy most of winter gathering food for his mate. The female will give birth to her young early in the spring, and, in the meantime, the man of the house forages regularly for food. His neat footprints are found everywhere within his range, leading out through the snow from his den or burrow entrance. All his caution can't prevent his tracks showing in the snow, although his tricks will puzzle you many times if you try to follow him.

The several weasels inhabiting Pennsylvania know no peace in winter. They can't relax and take it easy. Their insatiable appetite drives them out in all kinds of weather to hunt down mice, birds or whatever winter resident is stirring. As for the rabbits—the cottontail and the snowshoe, or varying hare—which are the weasels' occasional victims, they lead winter lives that seem singularly uncomfortable to us. Much of it is spent above ground. Only occasionally do they seek refuge in burrows, the varying hare especially seldom taking cover of any kind. Thus, they are exposed to snow, ice, cold, and all the things bent on making a meal of them.

And there are many predators abroad in winter—wildcats in our northern counties, weasels, foxes, domestic cats which run wild, wild dogs, some remaining hawks which haven't migrated south, great horned owls and the occasional snowy owl that comes down from the north. They need red meat to keep them alive and warm during winter, and rabbits provide a lot of food for their tables.

If any food is to be found in winter months, crows will find it. Big flocks, sometimes numbering many thousands, spend the nights in community roosts from which they spread out in the morning, scouring the countryside for food. On wind-cleared slopes, or where the sun has melted the snow from a field with southern exposure, the crows descend like a black cloud and pick up whatever they can find. They never seem to starve, and their defiant calls give animation to the winter scene.

Beneath all the snow that covers our State part of the winter there is other life. The roots and seeds that will push forth shoots when the warm days of spring come are waiting there, in the forest floor and in the fields. They, too, sleep over winter like our animal hibernators, and will awaken only when the warm rains and winds of March and April stir them out of their lethargy. You, in your comfortable home, are not the only one marking time while the snow swirls outside. There are many other creatures putting in the winter as best they can.



WINTER FOOD OF PENNSYLVANIA MINK—from Page 12

The bulk of the mink diet was composed of mice, shrews, fish, crayfish and insects. Mice and shrews made up 30.02% of the diet by frequency of occurrence. Fish made up 19.54% based upon frequency of occurrence.

Rabbit was present in only eight of the 105 digestive tracts which contained food items.

Birds appear to be only incidental items of diet. Of the four birds represented, only one, a song sparrow, was identified to species. The other three were represented simply by traces of feathers.

The high percentage of crayfish and small fish reflects the habits of the mink in frequenting water courses and marshes.

In three cases, definite traces of carrion were found. Deer hair occurred in two digestive tracts and the hair of a large, unidentified carnivore in another. Since most of these tracts were taken either during or immediately following, small game season, carrion in the form of dead rabbits, squirrels, etc., would be available to carnivores. But it is impossible, in most cases, to ascertain whether or not a given food item represents carrion or an actual kill by the mink. This possibility should be kept in mind since the incidence of carrion, if represented, would undoubtedly be higher during the season of the year represented by this report.

Remains of a mink, possibly representing carrion, was found in one digestive tract. Although the presence of mink hairs in the tracts was almost universal, and mink claws and toe bones were not uncommon, in this case almost an entire lower jaw was found, together with quantities of fur.

This report should be considered preliminary in nature, as the analyses are still being carried out and will be expanded to include the entire State as the work proceeds, but it was felt that the information obtained to date would be of interest to many trappers and sportsmen.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946

Of Pennsylvania Game News published monthly at Harrisburg, Pennsylvania for 1949.
State of Pennsylvania } ss.
County of Dauphin }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Willard T. Johns, Jr., who, having been duly sworn according to law, deposes and says that he is the Editor of the Pennsylvania Game News and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily, weekly, semiweekly or triweekly newspaper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, as amended by the acts of March 3, 1933, and July 2, 1946 (section 537, Postal Laws and Regulations), printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher—Commonwealth of Pennsylvania, Pennsylvania Game Commission, Harrisburg, Pa.

Editor—Willard T. Johns, Jr., Harrisburg, Pa.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

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3. That the known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

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5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above is (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

WILLARD T. JOHNS, JR.

Sworn to and subscribed before me this 22nd day of September, 1949.

(SEAL)

LUCILLE A. STROUP

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(My commission expires March 5, 1951.)



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*Stumped
again?*

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SEE HUNTING LICENSE FOR BAG LIMITS, HUNTING HOURS & SPECIAL REGULATIONS

DECEMBER 1949

SUN	MON	TUES	WED	THUR	FRI	SAT
OBEY THE LAWS	SAVE LIVES	PREVENT ACCIDENTS	HUNT SAFELY	1 NOW X	2 NOW X	3 NOW X
4 Trapping Only	5 NOW X	6 NOW X	7 NOW X	8 NOW X	9 NOW X	10 NOW X
11 Trapping Only	12 OX	13 OX	14 OX	15 OX	16 OX	17 OX
18 Trapping Only	19 OVX	20 OVX	21 OVX	22 OVX	23 OVX	24 OVX
25 Trapping Only	26 OVX	27 OVX	28 OVX	29 OVX	30 OVX	31 OVX

LOOK BEFORE YOU SHOOT!

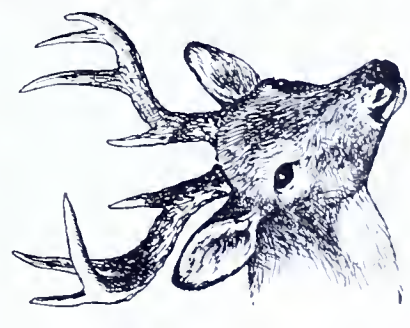
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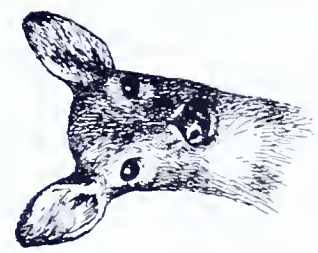
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D-DEER, MALES ONLY



ⓓ - DEER, ANTLERLESS



L- SKUNK



M- MINK



N- RED SQUIRREL



O- OPOSSUM



V-VARYING HARE (SNOWSHOE RABBIT)



W- OTTER



X- GRACKLE

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and
Best Wishes
for
A New Year
of
Outdoor Recreation and
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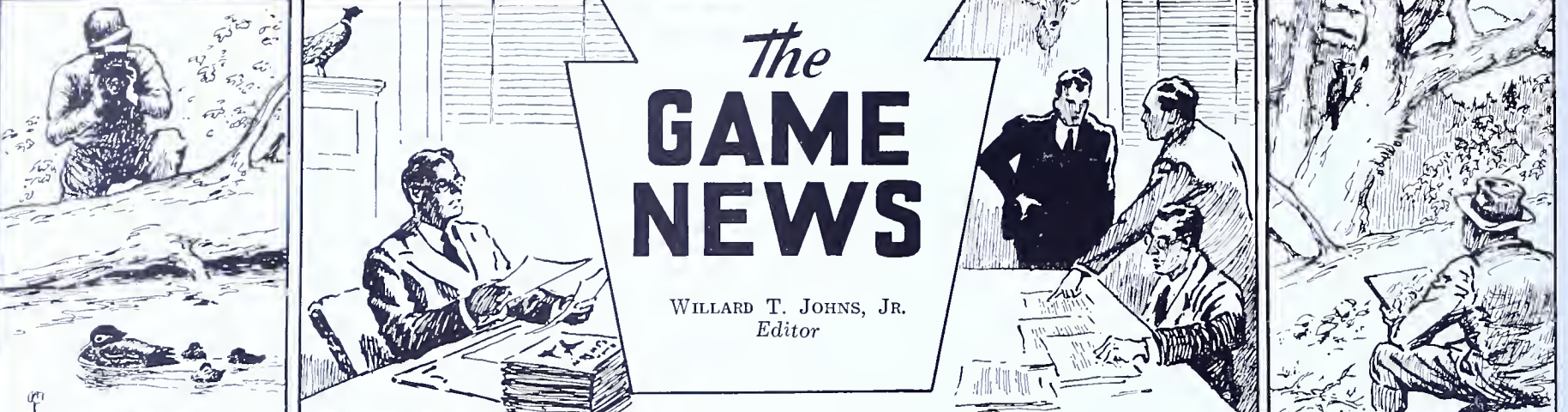
The Pennsylvania Game News

PENNSYLVANIA Game News



JANUARY 1950 *P38.34. 6 C.11*

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The GAME NEWS

WILLARD T. JOHNS, JR.
Editor

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COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR



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HALF WAY IN THE CENTURY OF PROGRESS

THIS month we celebrate the birth of a New Year that lies half way down the Twentieth Century's trail. With joyful commemoration we recall the past; with solemn resolution we toast the future. With memories we look back—with confidence we plan ahead.

We look back to the beginning of the Century of Progress, only fifty years ago. Back to the days when there were no airplanes, a few "horseless buggies," and deer were all but extinct. Back to the years when modern plumbing was a rarity, the telephone a novelty, and not a single pheasant inhabited our State. Back to the decades characterized by the horse instead of the horsepower, the "Tiller" rather than the tractor. "The good old days"—when a relatively few market hunters were blasting game into oblivion, loggers were laying our wooded hillsides bare, and the word "conservation" was practically unheard of let alone understood or practiced.

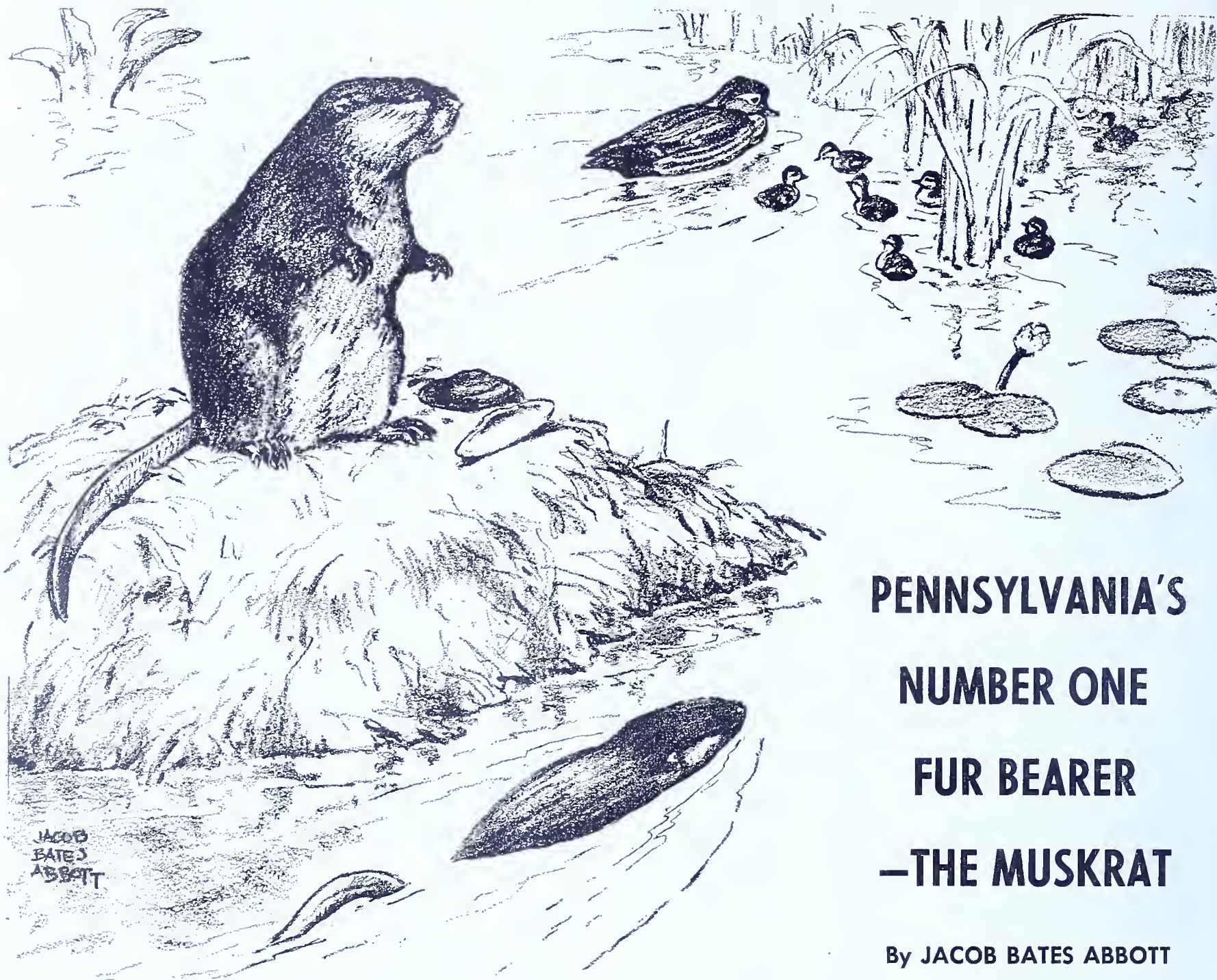
Those were the days when travel was slow and difficult. Most hunters walked while a fortunate few were taken to their favorite hunting grounds by the "old gray mare." The sportsman of that day carried the old, heavy, twist-steel, hammer-type gun, low velocity ammunition with black powder, and knew no hunting season. He had never heard of a hunting license and had little hope of seeing a deer, bear, or wild turkey. After each shot there was such a cloud of smoke that he would have to await its disappearance before he could see to shoot again, or know the result.

Fifty years ago the Game Commission was trying to stem the tide of game extinction with an annual budget of \$3,000, a handful of Game Protectors, and a few horses. Who had heard of organized sportsmen, Game Refuges, State Game Lands, Game Farms, or who believed the sport of hunting had a chance to survive more than a few years?

Today, a half century later, many of us have flown in an airplane to hunting grounds and most of us travel in our own automobiles to our favorite game territory. The sport of hunting is still growing and we measure our harvest of wildlife in terms of millions of pieces, including tens of thousands of deer each year. Where half a century ago there roamed a few hundred whitetails, there now lives an estimated 800,000. From the first importation of about 2,000 ringnecks by the Game Commission in 1915 has grown a population that today yields an average annual hunter harvest of approximately half a million. Sports afield in Pennsylvania during 1950 will be a two and a half billion dollar business, the Game Commission alone operating on a budget of almost four million. A million hunters will take to the fields and forests this year, over 100,000 miles of public highways will carry them to public hunting grounds, and they will tote modern guns with button safeties designed to fire smokeless, high velocity shells.

That is progress but, unsatisfied, we look and plan ahead—a year, five, even fifty—to improve our wildlife conditions and populations. With full realization that the past fifty years have brought great changes, we plan and work for a much greater "tomorrow." Because of broader understanding, systematic planning, and sympathetic assistance we look forward with confidence.

The first half century of progressive improvements points the way to the next half century of outstanding betterment! It is truly a Century of Progress!



PENNSYLVANIA'S NUMBER ONE FUR BEARER —THE MUSKRAT

By JACOB BATES ABBOTT

IT was mid-winter in Germantown, Pennsylvania, a blustery night of swirling snowflakes in the year before the turn of the century. A boy in his early teens was plodding through the storm near his home when he saw a small, dark shape in the path before him. It was a stocky little animal, about the size of a big kitten, with a long, bare tail. The furry beastling did not scuttle away as the boy approached, but held his ground, champing his yellow incisors and then—attacked. Darting forward, he scrambled up one of the boy's trouser legs, nearly reaching his waist before he was knocked to the ground. Recovering in a flash, he dashed up the other leg. The boy was carrying an umbrella and with it he finally put the animal out of business, but he knew that he'd been in a battle. What was this two-pound man-eater? A ravening young tiger escaped from the zoo? No—just a muskrat.

The foregoing story is quoted from "Lives of Game Animals" by Ernest Thompson Seton, who also cites a case of a muskrat attacking first a yoke of oxen that were toil-

ing along a prairie trail and then biting through the trousers of the man (Seton) who was driving them. Plenty of similar records may be dug out, all attesting to the fact that "*Ondatra zibethica*" is a desperate fighter when he thinks he is cornered, or that something is disputing his right of way or just because he is a tough hombre, period. Why this small beast, which is nothing more nor less than a gigantic field mouse, dreams up such pugnacious ideas has so far not been scientifically explained. Also why an animal that will dispute passage to an ox or a man is such a pushover for a mink presents another academic question.

It is his thick, soft underfur that makes this little water rodent so valuable to men, or, at least, to their wives and sweethearts. Hudson's Bay Company reports that the annual dollar value of the muskrat catch exceeds that of all other fur bearers combined. The same ratio is true in Pennsylvania where the \$1,000,000 rat harvest more than equals the money take on the pelts of all other animals. Muskrats rank first among fur bearers in total numbers also, not only in

Pennsylvania but throughout the country.

Fresh or slightly brackish water is a prime necessity for good muskrat habitat, with plenty of vegetable food easily available. Because they would rather swim than walk, water flooding through at ground level gives ideal living conditions. Through such a marsh the animals can easily dig a canal system and a network of underground tunnels. A peaty humus, formed by the remains of successive crops of drowned, decayed water weeds, makes the most suitable bottom for a muskrat marsh. Clay and sand present operation difficulties; the former offers tough digging and the latter allows too frequent cave-ins. Rats are scarce in salt water meadows, for a strong saline solution kills their favorite food plants. Along streams and ponds with high banks, that are otherwise suitable to muskrat life, the animals dig burrows in the earth, between tree roots or at the bases of rocks. The entrance to such a subterranean home is usually under water, slanting upward to the dry chamber. Tunnels over thirty feet in length have been found.

Flags and cattails form 80% of a muskrat's diet, although some animal food is eaten. Turtles seem to be the rat-epicure's first carnivorous choice and spotted, painted and musk turtles are often found, with their heads bitten off and otherwise partly consumed, on the tops of muskrat houses. Crab remains, too, are frequently scattered around feeding stations. In well-flooded marshes muskrats break down the rushes to form platforms or rafts on which they may sit, out of water, to eat. Often abandoned feeding platforms are used as defecating spots. Frequently the rats' fecal matter is deposited communally on stumps, floating boards or half-sunken logs. A list of popular muskrat food would include: Three-square sedge, saltmarsh bullrush, broad- and narrowleaf cattail, saltgrass, spikerush, sweet sedge, wild millet, needlegrass, marshmallow, dodder, waterlily, poison-ivy bark, turtles, crabs, salt- and freshwater mussels.

The miles of sedge-choked inlets within the sprawling reaches of the great Pymatuning Refuge offer ideal conditions to a large muskrat population. Their conical houses of dried cattails, mud and sod are scattered throughout the yellowing green flags. In summer, arrow weed and spatterdock sprinkle the unruffled pools, linked together by flooded lanes winding through alder and willow thickets and the rank water grasses. Wood and black ducks convoy their dainty youngsters in miniature flotillas along the reedy canals. Nesting red-winged blackbirds and long-billed marsh wrens "conquarie" and chatter from the gently waving cattail stalks. There is a steady hum of teeming insects, the air is heavy with sun-rotting, water-soaked vegetation and the slapping splash of jumping carp breaks through this avian-insectivorous overture at frequent intervals.



Muskrat young are usually born between April and September, although there are records of small kits being trapped in March and litters of pen-raised animals appearing in October. Six is the average number of young and there may be 3, or more, litters a year. Newly born muskrats are covered with fine, dark fur; their feet and tails are bright pink. They are blind at birth and do not open their eyes for nearly two weeks. The young are apt to squeal or squeak when disturbed, but old rats are usually silent.

The combined enemies, including man, of these robust little water rodents do not seem to affect their numbers to any appreciable extent. And, when you consider that 18,000,000 to 20,000,000 muskrat skins are marketed annually in the United States, you will agree that they are a hardy race. From 1763 to 1800, about 75,000 muskrat pelts were sold annually in the London market. By 1914 the number had risen to over 10,000,000. By the end of 1948 the number was about 20,000,000 for the United States alone, excluding Canada. Besides man, with his No. 1 steel jump trap, there is a large assortment of furred and feathered gangsters that are constantly muscling in on the muskrat's life, liberty and pursuit of happiness. Since the rats' activities are so largely nocturnal, owls are much more destructive to them than hawks. The great horned owl is probably (after man) muskrat Public Enemy No. 1. This death-in-the-dark is followed by the barred owl and barn owl as henchmen. Among diurnal birds of prey the marsh hawk is the greatest muskrat killer. The red tail and American roughleg take their toll, particularly on the winter marshes of southeastern Pennsylvania. Crows and turkey vultures often feed on trapped rats. The mink is the foremost animal predator and according to (Cram, 1923) "seems to prefer muskrat flesh to any other food, and hunts and kills muskrats, both old and young, at every season of the year." Red foxes and raccoons prey on muskrats and weasels take the young. Kit muskrats during their early swimming ventures present no serious obstacles to the voracious maws of foraging snapping turtles or large pickerel.

Good marshland, fed by unpolluted streams,

could yield 10 muskrat pelts per acre; extra cash practically handed out on a platter to a great many of the Commonwealth's farmers. Surely this is an inducement to the canny land-owner to maintain on his acreage, where possible, habitat congenial to the common fur bearers. When, as a boy, I trapped muskrats in 1908 and '09, I got 25 cents for the ordinary skins and 40 cents for the extra large and dark ones. In 1919 the best skins brought over \$5.00 apiece; and average price for the last fifteen years would be \$1.50. The November 1949 prices range from a top of \$2.55 for large, dark, northern skins to \$1.15 for southwestern mediums (Texas).

When properly skinned and built into a glamorous wrap for some long-bobbed lovely, the chunky little buck-toothed rodent takes on many aliases: "Hudson seal" (when sheared and dyed black); "mink-dyed or sable-dyed muskrat"; "let-out muskrat"; "Hollander-dyed muskrat." Ontario peltries of the "Rice Lake" class bring the top market price. Most Pennsylvania skins fall under the trade classifications of "Centrals" and "Maryland-Delaware-Jerseys" and are made into popular-priced coats.

Some of the successful methods of trapping muskrats would include:

1. Sets about two inches under water, at the base of their bank slides. Such traps should be staked in deep water so that the animal will drown.
2. Several traps nailed to a 10-foot board, covered with dry grass, with bait between the traps. Set afloat, it makes a congenial booby trap.
3. Traps set on dry land, in runways, feeding stations or at defecating posts. A No. 0 or No. 1 steel trap is standard equipment for taking muskrats.

With one exception, all muskrats are much the same—stout, blunt-nosed rodents with a laterally-compressed tail nearly as long as the eleven inch body. Of the common muskrat three distinct species are recognized: the typical form, (*zibethica*); the Newfoundland species (*obscurus*), and the species limited to Louisiana (*rivalicicus*).

(Continued on Page 27)



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A LIVING fence, that is an aid to soil conservation and wildlife, restoration and that is virtually stockproof, is making a place for itself on a growing number of American farms. It is the multiflora rose, a rugged customer that seems adapted to a large part of the country.

So far the multiflora rose fence has made its greatest progress in the Midwest, particularly in Missouri. But its wide range of adaptation is indicated by successful plantings in the Southern states, in the East as far north as New Hampshire and in the Northwest up to Brookings, South Dakota.

It is a natural for conservation farming because it is as easy to plant on the contour as in the straight row, and farmers with terrace systems find it's just the trick with which to fence out their grassed waterways.

Nearly ten years ago the author planted the first multiflora rose fence, in so far as records reveal, as a contour divider between two fields at the Soil Conservation Station at Elsberry, Missouri. This same planting, though the plants were spaced at three times the interval now recommended, later served as one side of a paddock which contained from time to time, sheep, cows, calves and goats.

Multiflora rose, properly grown, will turn the jumpin'est cow. In fact, men who are growing it say it will hold everything except small pigs and poultry.

The multiflora rose fence doesn't need clipping, pruning, training or supports. It thrives under a wide range of soil types and conditions, although, like most any plant, it is more vigorous on better soils. Its hardiness is suggested by the fact that it has been used for a number of years by commercial nurseries as "understock," on which to bud garden roses. It grows into a good, erect fence, about eight feet high, and then stops. Crops can be grown right up to it.

Farmers who grew up fighting the old Osage hedges, once so numerous throughout the Midwest, invariably ask two questions about the multiflora rose: Will it spread? How much does it sap adjacent ground? Spreading by suckering or layering is infrequent and no problem. Birds do carry seeds, and, if conditions are right, volunteer plants will appear along fence rows and other places. But even around the oldest plantings there are no instances of the multiflora becoming a nuisance.

Albert J. Milde, who farms near Jackson, Missouri, has extensive multiflora fences protecting grass waterways and terrace outlets and dividing fields. "The multiflora rose does not spread from roots or runners and does not kill the ground beyond its own limb spread as does the Osage orange," says Mr. Milde.

"Grown on soil of average to good fertility, it will produce a hedge in three or four years that will turn any kind of livestock except hogs. It might turn them, but my guess is that you would have small pigs that would tunnel under it.

"Our oldest planting, a terrace outlet about a quarter of a mile long, fenced on both sides, is now six years old and for the past four years has been used by quail, many kinds of song birds and game animals. My quail-hunting friends tell me that even a bird dog can't find a hole in such a fence."

"Livestock won't kill it but will hold back its growth by nipping the tender ends of the limbs on new plantings. For this reason it would pay to protect it with electric or temporary fence the first two years."

John Priest planted a half-mile long contour fence of multiflora rose eight years ago. On his farm, also near Jackson, Mr. Priest, who has done a remarkable job of restoring a rundown farm into one of the most productive in the area, said: "I think four years is all the time that it will take to have a fence that will hold any cattle. These roses intertwine and grow to a height of about eight feet, and you can cut with a mower right under the bushes and never have any weeds along the fence line. So far as holding the soil is concerned, these rose fences are holding it fast on my farm and they are on a very sloping hillside. If you have a place that looks like it is washing, I am sure, that, with a little straw thrown against the rose bushes, they will do the job."

A short time ago I visited some multiflora rose plantings on Southern Illinois farms. Conservationist Howard Turner took me to an old fence around a farm pond on Herman Bauer's place near Carlinville. This planting had developed into a beautiful but impregnable barrier. John J. Kunz, of the same vicinity, had a fence on some eroded, tight claypan soil. Despite the adverse site and three-foot spacing, the multiflora fence proved a barrier to cattle and horses.

"I was cold to this thing for several years," remarked Turner.

"Now I am sold on multiflora fences and have no trouble selling other farmers. What I like best is the way it controls fence-line weeds. I have yet to see any place where sprouts come up through it.

"I'm setting new wire fences on all the forty-acre lines on my farm. Then I'm going to plant these lines to multiflora and kiss my fence-maintenance problems good-by."

A report on an intensive research project by the Illinois Natural History Survey gives an interesting side light on the usefulness of the multiflora rose fences. This survey was designed to find a substitute for the Osage orange that would have the advantages and as few disadvantages of that old-timer as possible. Many species of trees and shrubs were tested, and the report says: "The Asiatic or multiflora rose proved far superior to all others." Then it adds: "An advantage of Asiatic rose fence rows is their value in reducing the amount of wind erosion during the late fall, winter and early spring. During these seasons strong persistent winds remove fertile soil from many fall-plowed Illinois fields. Damage, even greater than the loss of soil, often occurs in the spring months when heavy winds seriously injure corn and other young crops. Well-developed fence rows will not solve these problems completely, but will serve as windbreaks and tend to reduce the amount of wind damage. Fence rows tend also to minimize the effects of our prevailing westerly winds during the summer months, cutting down loss of moisture from fields and preventing resultant reduction in crop yields. Preliminary checks made in 1947 showed that corn yields were as much as 50 per cent greater in rows adjacent to rose hedges than in rows in the center of the same field."

Multiflora rose has become a Great White Hope of the men who manage our upland game supplies. Game administrators throughout the country have been under terrific pressure by sportsmen's groups to do something tangible toward the restoration of good hunting. At the same time these technicians know that the average farmer will not plant wildlife cover just so his city cousin can look at game down a gun barrel. Wildlife and conditions that foster it, these men know, must be a by-product of sound land use. So when the farmer appraises a multiflora fence and concludes it will solve a fencing problem for him, the wildlife biologist starts adding up quail. They can scarcely believe their findings on multiflora's value for escape, nesting and travel cover.

Besides confining livestock, serving as a haven for wildlife, and contributing to the soil conservation program, multiflora fences appear to be beneficial in other ways. The Illinois Natural History Survey points out that songbirds rear their young almost entirely on insects. (A young nestling eats his weight in insects daily.) Survey personnel found one songbird nest for every 70 feet of fence row and believe that this increase in songbirds is bound to have a dampening effect on the first broods of insects which in turn reproduce the hordes that cause crop damage later in the season.

Multiflora fences add to the beauty of a farm. Those who first gaze upon a contour fence in late May or early June are apt to draw a short gasp at the spectacle of a ribbon of bloom entwining the hillside. The white or dusty pink blooms come all at once in a profuse mass and lasts but two weeks. The individual flowers are small, the size of a quarter, and single. The foliage appears early in the spring and persists until heavy freezes of winter.

During the heyday of Osage-orange hedge planting nearly a century ago every conceivable manner of arranging the plants was tried. Ultimately a single row with the plants one foot apart in the row was adopted as standard practice. The soil was prepared by back-furrowing a planting strip six or eight feet wide, harrowing smooth and setting the plants in a row down the center of this slightly ridged strip. The plants were cultivated along with adjacent crops for two years.

After ten years' experience and tests with multiflora fences the writer believes that the procedure developed by the old hedge planters is tops in planting multiflora rose fences. Though the multiflora rose has a phenomenal ability to thrive under a wide range of soil conditions, growing a uniformly tight fence in a hurry calls for fertilization and mulching if soil conditions are adverse.

Mulching is the magic ingredient in encouraging vigorous growth of a multiflora fence, and it doesn't much matter what kind of mulching material is used—old stack butts, cotton hulls, sawdust, spoiled hay. The function of the mulch is purely physical, to suppress weeds, conserve soil moisture and probably to promote

(Continued on Page 25)



Multiflora rose has become the Great White Hope of men who manage our upland game supplies. Here a Pennsylvania Game Protector and Deputy inspect a multiflora fence in Dauphin County.



The average farmer will not plant wildlife cover just so his city cousin can look at game down a gun barrel.



Biologists can scarcely believe their findings on multiflora's value for escape, nesting, and travel cover. To the hunter multiflora means more and better hunting.

SOME BARE FACTS ON HIBERNATION

BY THEODORE C. CARLSON

Game Protector — District E-6



EVER since I was a youngster the word "Bear" always evoked immediate interest and attention. Fortunate I was to always be in bear country. Near Renovo, Clinton County, my birthplace, bears were quite common and later in my work with the Game Commission, I was again fortunate to be stationed in bear country, first along the Coudersport Pike, at the junction of Lycoming, Clinton and Potter Counties, and still later in Elk County.

Over a period of years, I've accumulated a mass of interesting experiences concerning bears and we're forever crossing each other's trails or running smack into each other. During one summer here in Elk County I saw nineteen bears, and on one occasion I saw eight different bears in one day. Yet I've had folks tell me, outdoorsmen, too, that they have never seen a living bear in the woods.

My interest always was in live bears and I've had little desire to kill them; in fact, when continually associated with animals, the average person loses all desire to destroy them.

To find a hibernating bear seems the last word in good luck—but is it? During one winter along the Coudersport Pike, I found seven different hibernating bears and several of these were females—that later produced two and three young. From experience I have found that bears like high dry country for hibernation, usually high upon a ridge or actually on the flat top of a mountain. They prefer the north side of the hills, that is, the dark side and I presume nature teaches them that here, temperatures stay more even, snow lays longer and they are better protected from sudden changes in the weather.

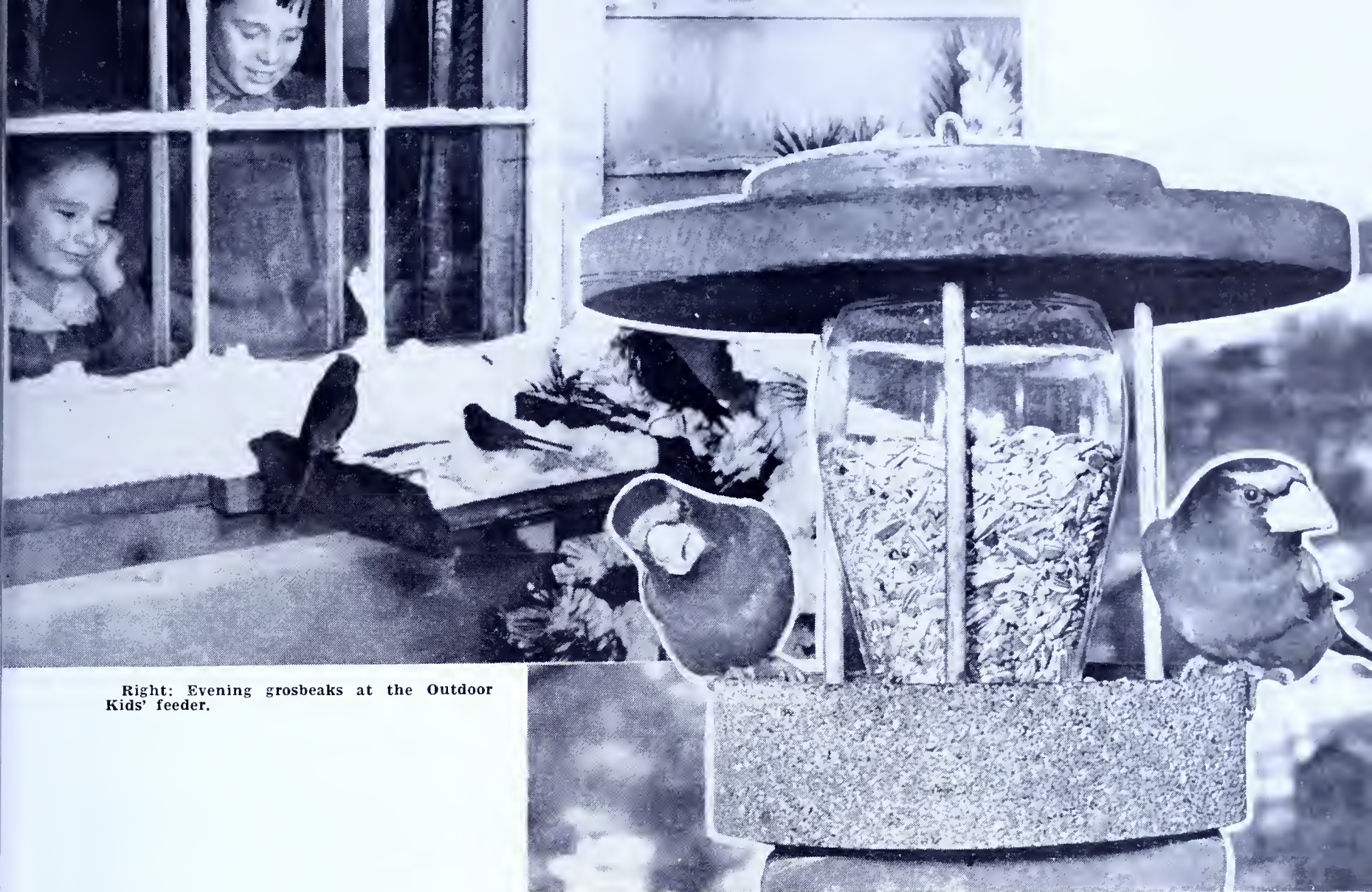
Females, hunt and find better dens than the males, usually under an overhanging rock, under a windfall or even in an old rotted stump. The males, on the other hand, are plumb careless on their choices. I've seen where they've raked in the leaves to a depression in the ground and snuggle down into them with no top shelter whatever and I doubt if either rain or snow bother them. One year I found the ultra in bear dens, on the headwaters of Young-womens Creek about two-thirds up the mountain side in a heavy laurel thicket. Laurel had been broken and bitten down until the bear had a pile about two feet high and then, evidently, like a dog, he kept twisting and turning in the bed until a deep depression was formed. This was lined with hemlock boughs and it looked more like a huge hen's nest than anything else and it did look mighty comfortable.

Cub bears, of course, are born during the mothers' hibernation. In Pennsylvania, this period is usually the last two weeks in January and most authorities agree that in a wild state, females produce young only every other year. In all my experiences

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E. Stanley Smith



Right: Evening grosbeaks at the Outdoor Kids' feeder.

OUTDOOR KIDS

By HAL H. HARRISON

ALL day Friday the snow had fallen in great white flakes. When school was out, the youngsters had enjoyed sled riding on the hillside at the edge of town. They were up early Saturday morning, ready for a big day out of doors.

They did not have to look far for something to interest them, for their yard was teeming with birds, attracted to the feeding stations that had been placed there for just such mornings as this. Breakfast was eaten in a hurry and the children paused at the window for a few minutes before bundling up for a day afield.

Just outside the dining room window, a feeding shelf had been placed with the hopes that some of the birds would come that close to the house. With the snow deep on the ground, the window shelf was enjoying its best business of the winter.

"Gosh, Billy, look at the cardinal. Isn't he beautiful against that white snow?" Jane asked her brother as they cautiously pulled back the drape and peered out of the window.

"Yea, and just look at him cracking those sunflower seeds. That old bill of his is a tough one all right," Billy exclaimed.

"A lot stronger than the nuthatch's bill," Jane replied. "Look at that nuthatch on the trunk of the maple. He

has the sunflower seed wedged in a crack of the bark and how he is hammering it. There! He cracked it open but the seed fell to the ground."

"Watch him go down head-first," her brother added.

With a call of "yank-yank-yank," the little gray-blue bird descended the tree head-first, stretched out to pick the seed from the ground and immediately wedged it in the bark where the bird began to eat it.

"I can count six chickadees in the yard right now," Jane announced as the children continued to watch this winter pageant from the window.

"And three titmice, too," Billy added.

"The seeds are sure finding customers today, Billy, look at the sparrows on that log under the arbor. How many kinds do you see?" she added.

"Tree sparrows and song sparrows are all I see, besides a few English sparrows," Billy replied.

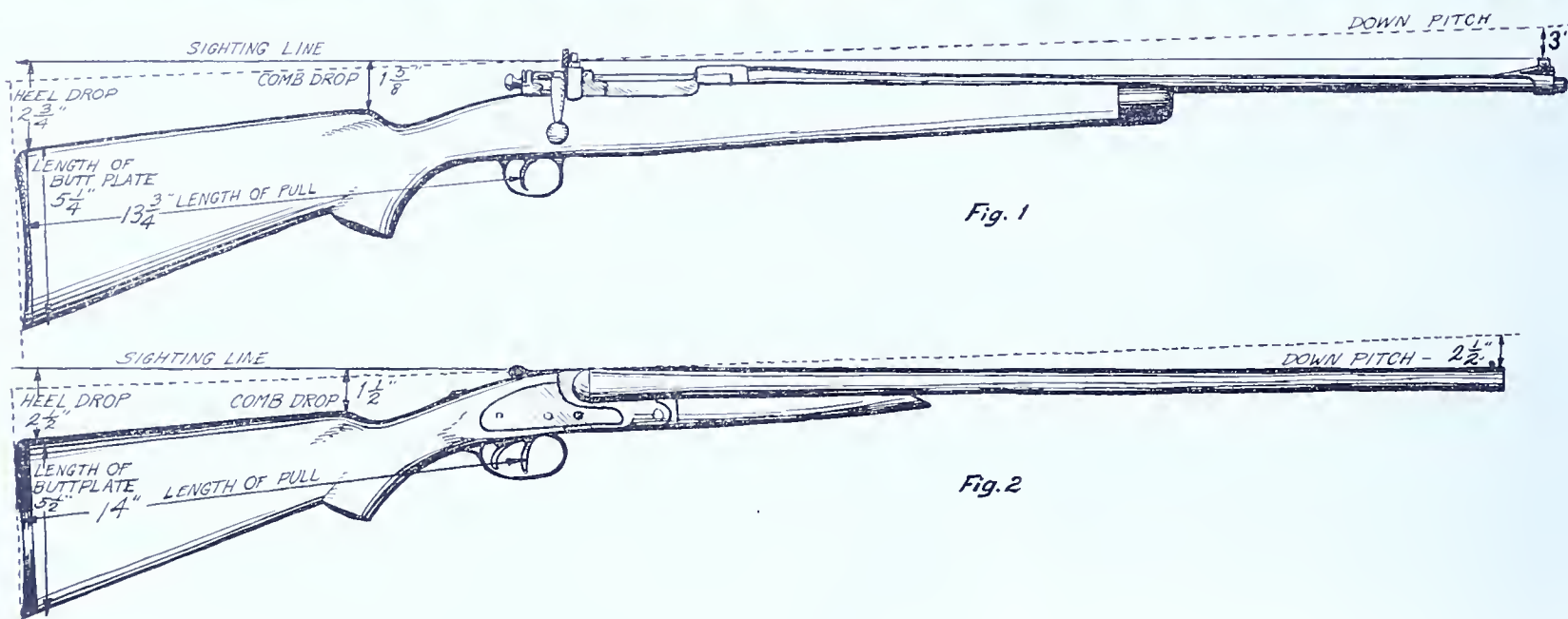
"What about the juncos? They're members of the sparrow family. Watch their white tail feathers when they fly," said Jane.

Billy spotted a brown creeper spiraling its way up the trunk of the maple and they watched this tiny, bark-colored bird with the decurved bill searching for insects and insect eggs in the crevices. It paid little attention

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An Introduction to Stockmaking

BY E. STANLEY SMITH



Part 1: Designing the stock; selection of material.

TWO distinct schools of thought are responsible for the dearth of successful amateur gunstockers. One is typified by the timid character who believes himself incapable of executing such painstaking work. The other represents the final decision of "know-it-all Joe" who, on examining an example of neat stockmaking, haughtily exclaims, "Huh, there's nothing to making a gunstock." After three or four days of blood, sweat and cusswords he finally emerges from his cellar workshop with the announcement that he doesn't have the time to waste on such foolishness—the snow must be shoveled or something.

To go back to the first type—it's a darn shame so many people handicap themselves with the idea that they can't do this or that, and stockmaking is avoided by many who would undoubtedly become quite proficient, but for this I-can't-do-it attitude. True, not every man who owns a pocketknife can be an Alvin Linden, but the average home-crafter can usually learn the fundamentals without too much trouble. Stockmaking is a tough game, however, calling for the utmost in patience and care. There is no place for sloppy workmanship in gun stocking; if you can't take your time you'll do better at some livelier pastime. Perhaps it's a mistake to devote so much space to this discussion of temperamental requirements but I don't want to persuade an action-hungry reader to participate in an undertaking in which he is a misfit. Nevertheless, for those who admire workmanship more than speed I'm certain stockmaking will prove highly rewarding, both in satisfaction with the finished product and in valuable experience picked up along the way.

The most common reason for restocking an arm is to obtain that all-important "fit." In a rifle proper fit is intended to improve

the holding qualities, while in a shotgun its purpose is to improve the pointing qualities. This accounts for the difference between the stock design of a rifle and a shotgun.

Another reason for restocking among riflemen is to improve accuracy through better bedding of the barrel. Some guns are restocked to improve their looks, while others are converted military arms that need new stocks. Some fellows even whittle out stocks just for the fun of it. By the time you've finished your first stock you'll think this is the biggest lie you ever heard, but I'll bet you'll be making another one within the next three months.

In designing a stock the first consideration will be its dimensions. Naturally these depend upon the build of the shooter. If you are a skinny, long-connected, flat-chested, scrawny-necked individual (a perfect word-picture of the author) you will need a long stock with a high comb. A stout, deep-chested fellow requires a shorter-than-average stock with a low comb. Grips also vary according to the hands of the shooter, as illustrated by the rifle grips in fig. 3.

A good idea of your requirements can be gleaned from figs. 1 and 2 which show the

dimensions of rifles and shotguns that fit shooters of average height and weight. By comparing your own physique with the average figures you can get a pretty good idea what you need. Try out all the guns of varying proportions you can lay your mitts on and take the measurements of those that seem right for you. Don't overlook any possible way to get a proper fit.

Comb height is one of the easiest dimensions to determine from another gun, but be sure to make your comb the same thickness or it still won't be right. The comb on a shotgun should raise your eye slightly above the level of the rib, while on a rifle it must bring your eye into perfect alignment with the sights with the correct amount of pressure. Whatever the height of the comb you put on your stock, don't form up one of those sharp, "paper-knife" affairs; the recoil will make your cheek feel as though it lost a bout with a trip-hammer. Make the comb fairly thick and round it off nicely, and you won't be troubled by recoil.

As mentioned above, the length of pull depends on the shooter's build, but generally speaking a rifle has a shorter stock than a field shotgun, and a trap gun has a longer stock than either.

Your gun's behavior forms a good basis for stock redesigning. For instance, if you habitually undershoot it's a good bet your stock has too much drop or down pitch. Overshooting is usually caused by the reverse of these conditions. The wrong comb thickness will cause canting, while an overlong stock often catches on the shooter's coat. If your right thumb mashes your schnozzle when the gun is fired that's a gentle indication that the stock is too short. If the recoil whips the muzzle upward and pounds the comb against your cheek it's likely the heel drop is excessive. These and other shortcomings are symptoms of an improperly fitting gunstock, and the recognition of their

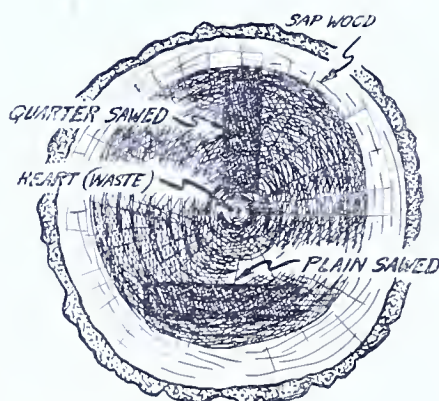


Fig. 4

causes will enable you to avoid the same mistakes in designing a new stock.

You can learn a great deal from your old gun by using it as a sort of try-gun. To lengthen the old stock merely loosen the buttplate screws and shim the plate with cardboard. By removing the buttplate the stock can be shortened, and by shimming either end of it the pitch can be changed at will. By this time you should have formed definite ideas of what constitutes the ideal stock for you, so the next step will be to put your ideas on paper.

Let's try a double barrel shotgun first and to make it more difficult let's pretend the old stock is missing. Lay the gun on its side on a sheet of heavy paper and draw a straight line on the paper to form a continuation of the line of sights (on a shotgun this amounts to the top of the rib.) Now measure the predetermined distance from the trigger and mark the place where the butt plate's to go. With a carpenter's square or a large right-angle triangle draw a line through this mark at right-angles to the sighting line. Along this new line mark the heel drop (let's make it $2\frac{1}{2}$ inches) and the toe of the butt plate, which will be about $5\frac{1}{2}$ inches below the heel. Now measure about $9\frac{1}{2}$ inches forward from the buttplate and, say $1\frac{1}{2}$ inches down from the sighting line to locate the point of the comb. In a graceful manner decurve this end of the comb and sweep it upward again to meet the curve of the upper tang. Continue this line along the tang until the rear edge of the frame is reached. Now, starting at the bottom of the rear edge of the frame trace the lower tang and extend this line into a well-formed pistol grip, keeping in mind that the center of the grip cap should lie directly beneath the point of the comb. As the trigger-guard tang is usually soft and can be formed to fit any desired contour it is not necessary to make your grip conform to the curve of the guard.

Now, with the aid of a straightedge join the heel of the butt and the point of the comb to form the top of a perfectly straight comb. Do the same on the underside of the stock between the toe of the stock and the rear of the grip cap.

With a very sharp pencil mark the exact angle and location of the rear face of the frame, (fig. 5). This must be done carefully to preserve the correct angle between the frame and the sighting line, as this angle guides the initial inletting so that the desired drop will be produced.

The final dimension to be determined is the pitch. Say you want a down pitch of $2\frac{1}{2}$ inches. Run a line from a point $2\frac{1}{2}$ inches above the muzzle to a point beyond the butt, touching the rib at the breech. A line passing through the center of the butt plate at right angles to this other line will give you the proper angle for the butt plate. This will complete the outline of your proposed stock, which should be cut out to be used later as a pattern.

If you desire a bolt action stock, place the action and barrel on the paper and establish the line of sights, the drop at heel and comb, the butt plate location and pitch, and the outline of the pistol grip. The various points of difference between a shot gun stock and a rifle stock should be observed. For instance,

the rifle stock is shorter, the pistol grip closer and heavier and the comb usually, although not always, slightly heavier. Instead of the rear face of the frame, the center of the bore serves as the primary guide line on this type stock, and should be plainly and accurately marked on the paper. On most bolt action rifles the depth of the stock at the receiver is determined by the size of the magazine. From this point the bottom line of the stock should taper to about $1\frac{1}{4}$ inch in depth at the fore-end tip, except in the case of a target

tremely hard and tough, has fine grain that can be beautifully checked and finished, and its color ranges from yellowish brown to a deep purplish brown that appears almost black.

Next in favor is American black walnut. As this native wood varies widely in quality it should be chosen with care. Trees found on high, dry, stony ground grow more slowly than those of the bottom lands; consequently the wood is harder and the grain closer. Shun soft, coarse-grained wood as you would smallpox, for it's religion-wreckin' stuff to try to inlet or check.

Hard maple has been gaining popularity as a stock wood in recent years and there's no good reason why it shouldn't be used. Its hard, tough, fine-grained wood takes a beautiful finish and makes a serviceable stock.

Whatever the wood you choose it *must* be thoroughly dry or it is absolutely worthless. An improperly seasoned stock is likely to crack, and the inevitable shrinkage will not only ruin the inletting job but, in the case of a rifle, will also effect its accuracy. Kiln dried walnut is preferred because of its extremely low moisture content, but wood that has been thoroughly air dried in the plank for a period of $1\frac{1}{2}$ years per inch of thickness will usually be satisfactory.

To produce the finest figure all blanks except those cut from stump wood should be plain sawed, not quarter sawed, (fig. 5) and should not include any sapwood. The very heart of the tree should not be used either, as it warps and cracks badly. The grain should run through the stock at the angle shown in fig. 6, not parallel to the bore of the gun. By laying it out this way the grain will be straight in the grip, ordinarily the weakest part of a stock, and the cross-grain in the fore-end will prevent its exerting too much warping force upon the barrel. Another way in which lots of fellows go wrong is to allow curly grain in the grip of a stock. A nice burly stock is a mighty pretty thing, but the grip should be straight, from the standpoint of strength as well as ease of inletting.

To prepare a scattergun blank for inletting first go to work on it with a good sharp plane and straighten up the right side of the blank, eliminating any twist or curve that might be present. Then apply the pattern allowing the margins indicated in fig. 5. Cut the breech end of the stock to the exact angle of the rear face of the frame and be sure it and the top of the grip are both square with the planed right side of the blank. Of course, if your gun calls for a pair of projections of the stock wood to fit into recesses inside the frame you'll have to allow for these lugs on the end of your blank. Now, with a marking gauge scribe a center line completely around the edge of the blank and it's ready to fit to the action.

A bolt action rifle blank is also planed true on the right side. Provided the shape of the blank permits, the entire top edge from one end to the other is planed perfectly straight and at right angles to the right side (fig. 6). The barrel and action are later inletted half their depth into this edge, plus $1/16$ inch for truing up after inletting. With this edge properly planed and the metal

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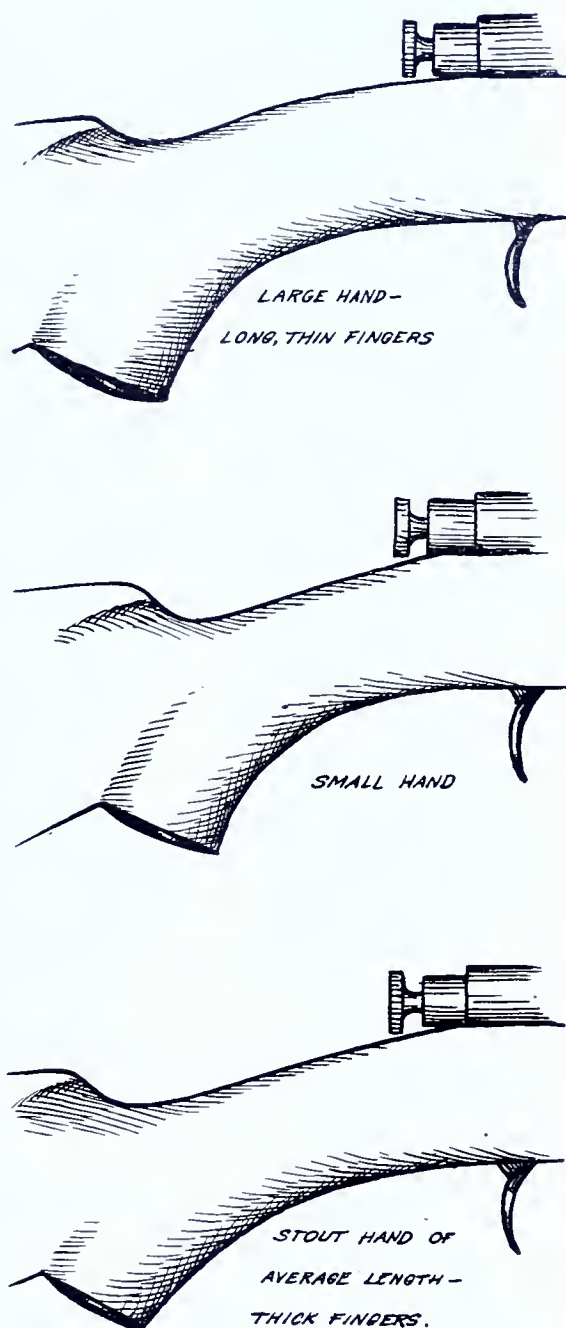


Fig 3. PISTOL GRIPS TO FIT HANDS OF VARIOUS TYPES.

rifle which is generally thicker. The properly designed fore-end on a rifle should support at least half the length of the barrel. When the pattern is finished, cut it out as we did the shotgun pattern.

Now let's take up the matter of suitable wood for the stock. If you insist on having nothing but the best for your initial attempt at wood butchery I don't suppose you could be talked out of it,—so here's the dope. Old World walnut is generally considered the best, with the variety known as Circassian walnut heading the list. This wood is ex-

NEXT MONTH'S



GAME NEWS

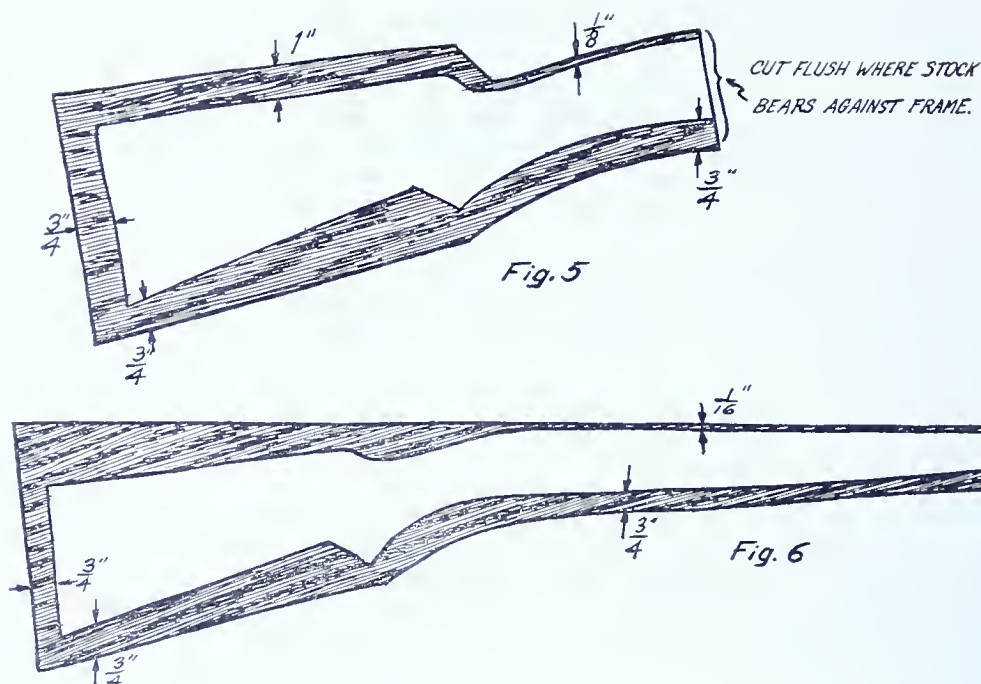
HAL HARRISON—Kodachrome comes to the covers of **GAME NEWS**! For the first in a new series of natural color photographs on "Your Game Commission At Work," Harrison's versatile camera records a Game Protector engaged in winter trapping. In addition a new, special feature will bring you the story behind the cover to enable you to know your Game Commission—its work and workers.

E. STANLEY SMITH—In case you haven't noticed, there are more different kinds of shot guns floating around the country than there are starlings in your home-town square. In one, easy-to-learn lesson the Commission's talented staff artist let's you in on the secret of inletting your own shotgun action. Ably illustrated and written, here's the second installment in a new series on stockmaking.

N. R. CASILLO—Survival in the wild depends upon perpetual vigilance, even upon the part of an animal as small as the shrew. In the food-scarce days and nights of mid-winter, all of Pennsylvania's wildlife must be on constant guard to protect their own lives as well as on everlasting alertness to find their own food. The shrew, screech owl, mink, and wildcat are no exceptions.

ED SHEARER—What happens to the deer in winter? After hunters leave the woods in mid-December, few urban dwellers ever get off the beaten tracks and into the woods to learn the habits of Pennsylvania's most magnificent big game animal when "it's cold outside." Now, the **GAME NEWS**' popular gun editor takes us back to his early woodsman's days for a personal visit in a deer yard.

MANLEY MINER—The son of the late Jack Miner, famous Canadian naturalist, shares his father's firm belief in predator control and carries on his theories of wildlife management at the world renowned wild-fowl sanctuary near Kingsville, Ontario.



parts inletted in the correct manner the desired drop will result. If you wish to use a fore-end tip cut the fore-end $1\frac{1}{2}$ or 2 inches shorter than the pattern. Then scribe a center line around the blank as we did with the shotgun blank and it will be ready for the whittling, carving, scraping and trembling operation known as inletting.

You won't need a whole workshop full of tools for the inletting work,—the chief requirement is that you know how to use what you have. A set of chisels ranging in size from $\frac{1}{8}$ to 1 inch and $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ and $\frac{3}{4}$ inch gouges are almost indispensable. A hand drill with a good assortment of twist drills will be needed to form the various screw holes. A brace and bit is used to remove wood from magazine mortises, etc., and to bore the holes for butt-stock bolts. A thin bladed knife is used to cut around the outlines of the inletting cuts. A steel machinists scale, a depth gauge, a pair of dividers and a pair of outside calipers are used to lay out and check the work. A tube of Prussian blue ground in linseed oil is used to indicate the places where the wood is binding. A few assorted files and scrapers, (the latter can be made from old files) just about complete the list.

For a double-barrel shotgun you will need a clamp like the one in fig. 7, to hold the frame in the partially inletted stock while the trigger bar is being fitted.

In case you are contemplating stocking a rifle similar to the Springfield you will need a headless screw to take the place of the

front guard screw. This will assure perfect alignment by guiding the receiver into place during the inletting. These screws can be bought through various gunsmiths' supply houses if you aren't equipped to make your own.

You should now be ready to tackle your first gunstock. The inletting, shaping and finishing of your stock will be discussed in subsequent installments, and it is my fervent hope that this series of articles will prevent your first attempt at gun stocking from looking like some of the first attempts I've seen, (including my own.) The worst example I can recall was a green locust-wood monstrosity hung on a fine double barrel shotgun that was brought to me by its irate owner, a huge farmer from across the mountain. It seems a "friend" had offered to restock the gun and had not only botched the wood working part of the job but had used a hammer to make the lock plates conform to the contour of his stock. Before seeing this example of his friend's workmanship I asked the owner what was wrong with the stock. "Look, vunst," he roared, as he pulled the gun out of his car. White with rage he grasped the buttplate with a ham-like paw and, to the sickening accompaniment of crunching wood and flying splinters wrenched the stock right off the gun. "See," he continued, "it comes too easy off."

The cuckoo lays her eggs in other birds' nests, allowing her young to be reared by foster parents. She makes a rasping, cough-like sound which does not remotely resemble the "cuckoo, cuckoo" from which her name is supposed to be derived.

"Like a duck takes to water" is a familiar expression. Swimming, of course, is a natural instinct with ducks. Young mallard ducks, upon their first venture from the nest, have been known to swim as far as a third of a mile.

Many consider the beaver quite a harmless animal. When aroused, however, it becomes one of the deadliest of water fighters, easily killing a hunting dog if attacked in the water.

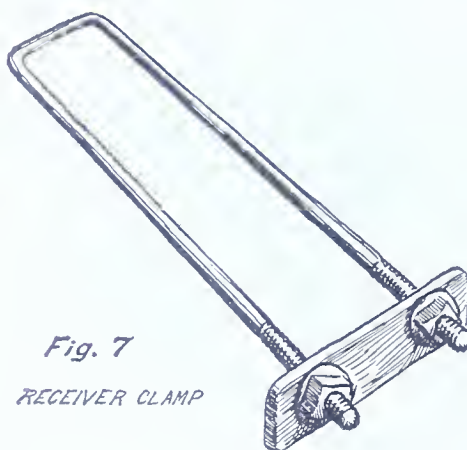
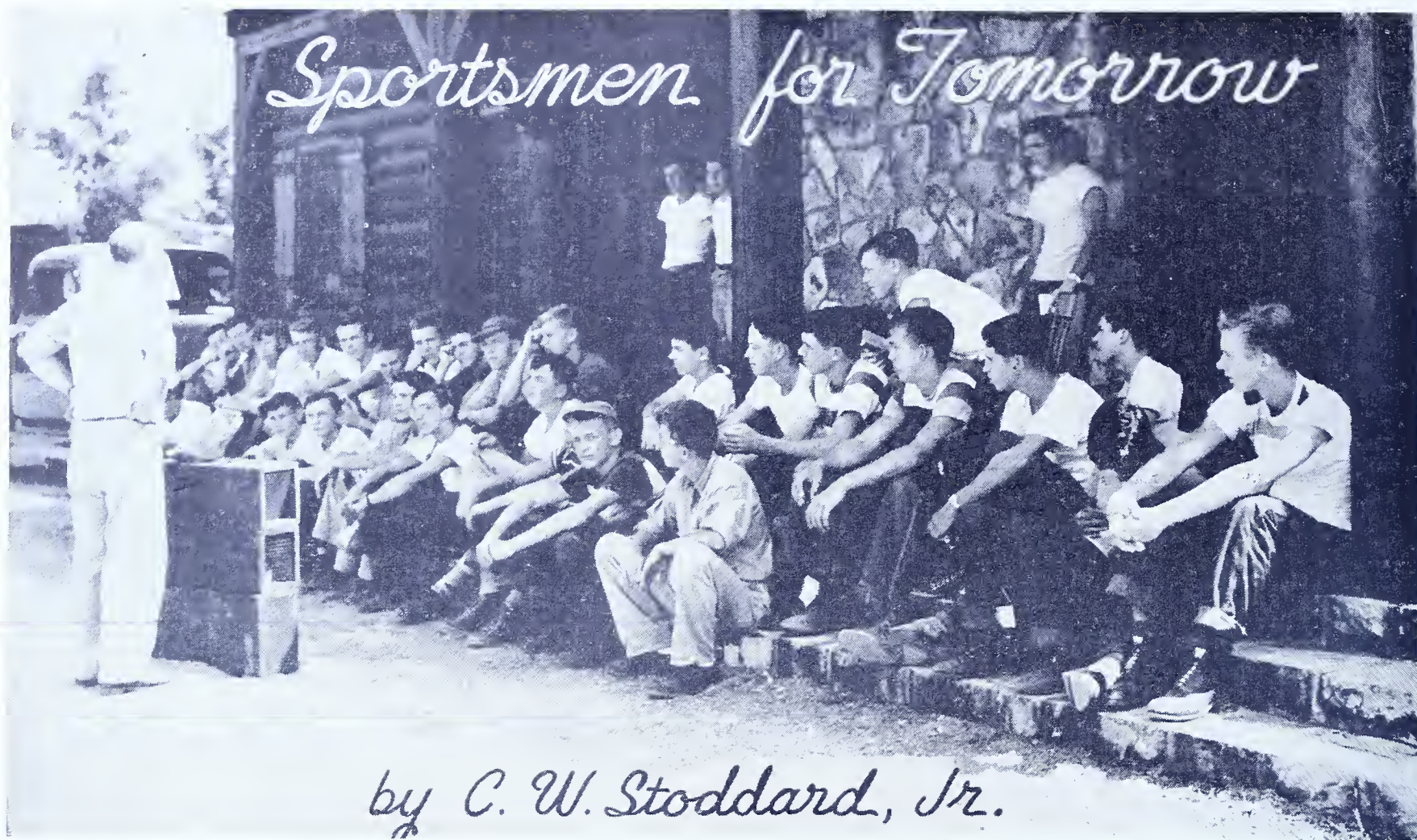


Fig. 7

RECEIVER CLAMP

SCALE $\frac{3}{4}'' = 1 \text{ FOOT}$



CONSERVATION education through camping was started in Pennsylvania in the summer of 1949. The camp was sponsored by the Pennsylvania Federation of Sportsmen's Clubs in cooperation with the Pennsylvania State College, the Pennsylvania Fish Commission, the Pennsylvania Game Commission, the Pennsylvania Department of Forests and Waters, the Sanitary Water Board of the Pennsylvania Department of Health, and the U. S. Soil Conservation Service.

High school boys from all parts of Pennsylvania attended the camp, there being 171 boys representing 52 counties of the Commonwealth. The Pennsylvania Federation of Sportsmen's Clubs is comprised of eight divisions and each division was invited to send 25 boys to the camp. In order to have not more than 50 boys in camp for each ten-day session, two divisions at a time sent boys, who were sponsored by their local clubs. The boys were selected for their leadership abilities plus an interest in hunting and fishing. Thus, the first group entered camp on July 4th and the last of the four sessions closed on August 13th.

Through the courtesy of the School of Engineering of the Pennsylvania State College, the Civil Engineering Camp was made available. This camp is located twelve miles from State College in the experimental forest area. It consists of a large main building, which includes a lounge, dining room and kitchen, plus a lecture room. Four boys were housed in each of the tents which have wooden platforms and are equipped with electric lights. There are separate buildings for toilet and shower facilities. The camp was fortunate to have the regular cooks of the Civil Engineering Camp, Mrs. Bubbs and her assistant, so that the boys were supplied with an abundance of healthful and well-prepared food.

The aim of the project was to teach the boys the wise use of all the natural resources: soil, water, forests, minerals and wildlife, showing the inter-relationship of one to the other. The conservation of human and social resources was stressed by the camp staff. The boys were all assigned various camp duties such as waiting on table, washing dishes, peeling potatoes, sweeping the main camp, cleaning the washrooms, and flag raising. These assignments rotated so that every day the boys had different responsibilities.

PROGRAM

Outdoor Woodcraft, Camping, and Survival

The first day the boys were in camp the time was devoted to

outdoor woodcraft, camping, and survival. This program was conducted by the Camp Counselor, Charles Ridenour, and his assistants, John and James Dittmar. It consisted of a lecture on clothing and woods equipment, environmental hazards such as poison ivy, oak and sumac and the poisonous snakes. Safety was stressed as was sportsmanship and good manners in the out of doors. The boys were divided into small groups and shown how to take a bearing by compass. Each group with a map and compass then set out on a cross-country hike. A survival trip showing how to locate and build shelters, camp sanitation, fire building and care, wild plant and animal food, care and methods of securing drinking water, especially from a grapevine, was part of this trip. In the evening the boys were given a lecture on fly tying and fishing techniques. Movies of wildlife and conservation followed.

Department of Forests and Waters

The Department of Forests and Waters program consisted of a day's trip to a nursery for first-hand information on forestry methods. In the morning Mr. Chamberlain, who is in charge of the Greenwood Furnace nursery, did a fine job in educating the boys to the latest conservation practices. For the afternoon session the group traveled to the Greenwood Fire Tower. The boys assisted Forest Ranger Lightner in cutting a fire trail, using the tools of the fire fighters. A trip up the fire tower was conducted by Mr. Smith who explained forest fire reporting and plotting. He also told the boys of the work of the Department. Mr. Ben Gipple spoke to the boys in the evening, emphasizing the importance of conservation, sportsmanship, and the inter-relationship of all of our resources. Several excellent movies were shown by the Department. The next half day was devoted to tree, bird, and plant identification. This phase included a hike in the woods and a lecture by Messrs. Augenback and Mickilites.

State College Department of Forestry

The Department of Forestry, School of Agriculture of the Pennsylvania State College had charge of the program in the afternoon of the second day. Dr. Bramble and Professor Cope, with two assistants, conducted this very interesting and practical program. A trip was made to the forest area nearby where tree cutting was demonstrated by experts. The boys were shown the safe way to use the bow and cross-cut saws, the single and double bitted axes. Boys who had never cut down a tree felled one and

dropped it in the area marked. Again in the evening the boys enjoyed movies—this time forestry films.

Fish Commission

For the Fish Commission program the boys left camp by bus at 8 a. m. and journeyed to the Pleasant Gap Fish Hatchery. Here Mr. Buller took charge, showing the boys the bass and trout rearing ponds and explaining the methods of raising fish. He discussed stream and underground pollution, sportsmanship and general conservation. From here the boys were taken to the Fisherman's Paradise where a picnic lunch was served. This was followed by a lecture and demonstration by Mr. Bradford, a stream biologist. The first two camps had an opportunity to fish at the Paradise and several trout were landed by the boys using flies which they had tied at the camp. Since the Paradise season had closed when the other camps were in session, the boys were taken back to State College for a swim in the Glennland Pool. To round out the day's activities, movies were shown in the evening.

Wildlife Research

The fifth day of camp was devoted to the Wildlife Research Program. Dr. Sharp, leader of the Pennsylvania Cooperative Wildlife Research Unit at State College, by lecture and a hike, presented the wildlife picture to the boys. He discussed farm and forest game and showed the boys specimens of our various game animals, migratory game and furbearers, and pointed out habitat, suitable ranges, etc. Dr. Sharp showed how to develop and manage game habitat and discussed some practical projects with the boys. Wildlife movies concluded this program.

Sanitary Water Board

Mr. Gittens, new Secretary of the Sanitary Water Board, gave an informative talk on stream pollution problems and programs. He discussed rural sanitation, types of springs and wells and their safety for use, sewage disposal and urban sanitation. This was an evening program followed by the film, "Clean Streams" which was enjoyed by all.

Conservation and Geology

Conservation and Geology was a half-day session conducted by Dr. Allen of the School of Mineral Industries of the Pennsylvania State College. He introduced the boys to Pennsylvania's geologic history with a discussion of mining and the necessity for conserving our mineral resources. The correlation between soil and bed-rock was brought out, and the erosion cycle explained. The program ended with the showing of colored slides and illustrations.

Game Commission

Mr. Wilbur Cramer, Assistant to the Executive Director, explained the Game Commission organization and program. He

showed the boys how to live-trap rabbits. Predator trapping was demonstrated by Mr. Chick. Mr. Ganster and Deputy Game Protector Reed lectured on firearms safety. This was followed by actual firing on the range. Eight boys fired perfect 300 scores during the competition. The camp affiliated itself with the National Rifle Association so that many boys qualified as expert marksmen and others earned arm bands. Prizes were given by the Game Commission to the five highest boys in each camp. This program took a day and a half and included movies and a general discussion period during the evening of the first day.

Soil Conservation Service

The Soil Conservation program consisted of a bus trip to the Dry Run Soil Conservation Area where Mr. Warner and four assistants had a full day with the boys. They learned about soils and land capabilities, farm planning, the use of levels, forestry and wildlife, and how to fish, fertilize, and manage a farm fish pond. They studied farm conservation practices, actually participating in Mr. Warner's well planned program. Mr. Warner returned to camp with the boys and showed them several excellent movies.

Many Boy Scouts attended the camp, among them 6 Eagle Scouts and numerous Star and Life Scouts. The boys were given an opportunity to secure the information for Forestry, Marksmanship, and Conservation Merit Badges. About 35 of the boys passed these tests while in camp.

Follow-Up Program

The follow-up program is the most important phase of this type of conservation education. All clubs that sponsored a boy pledged themselves to assist the boy in organizing a junior conservation club. To facilitate this movement, the boys were supplied with all the necessary information before leaving camp. Each boy was given a Junior Conservation Manual outlining a suggested program and activities to cover a two-year period. He was given a bibliography of conservation books and pamphlets prepared by the National Committee on Policies in Conservation Education. In addition, each boy was instructed in the methods of organizing a junior conservation club in his particular area—city, town, or rural. He had a working knowledge of the organization of the Pennsylvania Federation of Sportsmen's Clubs and its affiliation with the National Wildlife Federation.

To complete their equipment the boys each had a list of the teachers who had attended the Conservation Laboratory at the Pennsylvania State College. This material, plus the assistance of teachers, local leaders, State departments, and the Pennsylvania State College Extension Services, should enable every boy to further conservation education in his community. The whole program was designed to give the boys a broader knowledge of the vast natural wealth of our nation, together with a realization of their obligation to protect these resources.



Game Protector Clint Ganster gives the junior sportsmen important briefing on firearms safety . . .



. . . and then gives them actual instruction on the firing line.

Trapping in Winter's Wonderland"



by Frank J. Fluss

TO THE expert trapper the taking of fur animals is a simple task when fair weather prevails. Even the beginner may not find it difficult to trap his share of the fur crop during good days. However, when winter comes and covers the ground with her blanket of snow, and the frigid breath of the north freezes everything in its path, the taking of fur-bearers by steel trap becomes an arduous task. Here again the expert with years of trapping experience behind him takes his share of furs because through trial and error he learned just what sets to use and how to make them, regardless of the amount of snow and freezing weather that mother nature dished out to him.

However, with the beginner it's a different story. To his chagrin he finds that winter with its snow and cold freezing weather puts his simple fair weather sets out of order. And compared to his good weather take, his take of fur dwindles off to practically nothing, and he is at loss as to what

sets to use in the snow or how to keep his traps from freezing up. After the first freeze or snow fall he either finds his traps frozen to the ground or covered by snow, and to add insult to injury, the tracks of animals that walked right over the pans of his traps without setting them off.

On finding such conditions the beginner's first thought is to pull up his traps and discontinue trapping until a thaw comes. However, that is not necessary. It's a simple matter to lift them and then reset them so that they will work and catch fur regardless of how cold or how much snow is on the ground. All it takes is the proper knowledge of what kind of sets to make and how to set them so that they will work and catch fur.

Old experienced trappers are proficient in making sets during the winter that require skill to make. However, the beginner need not worry about such hard to construct sets. He can do fairly well by sticking to those that are simple to construct, and take little

in the way of material to insure a good set.

Most new trappers know how to make sets that will catch skunks, opossum, and other easy to catch fur animals. So we'll start by giving you the lowdown on those that are considered tricky to catch, and if space permits give you some sets for the lesser fur animals.

Here in Pennsylvania the fox is considered the hardest to catch so we will start out with him. Not only is the fox "number one," when it comes to cunning, he is also number one, in the number of game birds and game animals that he takes for food. For the last several years there has been an over abundance of them in this state, thus the new trapper should not hesitate about trapping for them his chances of making a good catch of fox are good.

When trapping for the fox with snow on the ground I used to use what is known as the "Tree Set." To make this set, pick out a tree that has a knoll about twenty feet away from it. Then take a small chicken

and hang it on the tree about ten feet from the ground, so that the fox can see it. Then sink a couple of traps in the snow on the knoll, and conceal them by placing a piece of thin white paper over the jaws and pans, then sprinkle snow over them so that the knoll will look just like it did before you set your traps on it. When sprinkling the snow over the traps don't use your hands, use either your hand-axe or a piece of bark from a tree. If you use your hands, the heat from them will cause the snow to start melting, and when it freezes again it will form a crust over your traps. When you have your set completed, walk in your same tracks back to the tree the chicken is on, then take a bushy limb, and while walking backwards cover up all your tracks. When you have backed and covered up your tracks to a safe distance from the set, continue on from your old track as if you had never veered from your course. The success of this set, is based on an old habit of the fox picking a knoll to howl from. Of course, if you have been reading this carefully you will have noticed that the bait being ten feet from the ground is too high for the fox to reach. Well he is not supposed to get the bait. The idea is that he will try unsuccessfully to get the bait, and on failing to get the chicken, in disappointment and anger he will go back to the knoll to howl and get caught.

Don't be careless with your fox traps or sets, the fox has a wonderful sense of smell and an eye for detail. He will not visit a set that smells of a human. He will also steer clear of an area that looks unnatural. Boil all your fox traps in water to which oak chips have been added, to remove the human odor. Then never touch the traps or the area surrounding your set with the bare hands. When handling your traps and making a set use clean gloves, and after making a set put everything back the way you found it originally. In other words make your set compare in looks with the surrounding; then it will give no evidence that the area has been molested.

Next under the Floss rating of fur animals that are hard or at least takes a little thought to catch, we have the mink. A set that has produced many mink for me is one that has been used for many years by mink trappers. Of course, no two trappers make their sets exactly alike, even from a diagram, and I have made certain modifications on this set. Therefore I don't want some old mink trapper—if he reads this—to write in and tell me, that's not the way to make this certain set.

In the north country during real cold weather and deep snow mink don't travel much, in fact, they may stay dened up for a week or two at a time. Even when they do come out they don't stray far from their den, and usually there is a whole family in one den. But, here in Pennsylvania, where our winters are not so severe, they rarely den up for more than two or three days at a time, and they can be trapped most of the winter. When you locate a mink den you will find many run-ways leading to and from it. Pick out the run-way that is used the most, and make your set in it some distance from the den. Don't go too close to their den or molest the area

around it, or the mink will become suspicious and move out. Dig a hole in the run-way to fit the shape of your trap; then put your trap in it so that the top of the trap will just be a little below the bottom of the run-way. Next cover the trap with a thin sheet of white paper; over this sift snow so as to cover it. Then take the blade of your hand-axe and very lightly smooth the snow over the trap so that the run-way is level again. If you leave a bump of snow over the trap the mink will go around it, he will not step on it. Here again let me caution you against using your hands to sift snow over the trap with, use your hand-axe or something else that is as cold as the snow. For if a crust forms over your trap you will not catch your mink. The tread of a mink is very light, they can step on a trap covered with three inches of firm snow without springing it, let alone one that has a crust of snow over it. In setting your trap staple it to cut brush, don't anchor it to anything solid. For in freezing weather a mink's foot caught between the jaws of an iron trap freezes very quickly, and as he can't feel pain in the frozen foot, he will pull, twist, and turn, until he

wondering why I don't recommend a baited set for mink during freezing weather, it's because the bait soon freezes solid, and mink will not pay any attention to it. They prefer warm meat.

Now we come to the weasel, this little blood lusty killer is in no way anybody's fool and sometimes he is just as hard to trap as the fox. However sometimes his stomach over-rules his cleverness and as a result he finds himself the victim instead of the victimized. All in all, though, he is worth trapping, and is found living in the holes of other animals, in rock piles, in rocky ledges, in hollow trees and hollow logs. Snow does not hinder him in his hunt for food; he is so light that he can travel over all but the lightest snow with ease. In fact the best time to trap him is when there is snow on the ground, for then the small mammals that he preys on for food usually hole up and he finds it hard to secure food and is easily attracted to a baited set. Chicken heads, the byproducts of a Sunday dinner, make a good bait for the weasel if hung inside a hollow tree, or placed in a hollow log. These two places make a good place to trap the weasel when snow is on the ground for the weasel frequents them in his rounds looking for food. In the hollow tree set, place the chicken head a few feet off the ground by nailing it up inside the tree, then place your trap in the opening at the base of the tree where the weasel will have to walk over it in order to get to the bait. However, don't leave the trap out in plain view, dig a hole for the trap and cover it with the rotten wood found in the base. Here again it is wise to keep your traps free of human scent. The weasel has a keen nose and will avoid places that smell too strongly with human scent. Also look over the hollow tree that you make your set in and be sure that there are no holes leading into the tree from above your bait. If there is, the weasel, being a good climber, may approach and get your bait from above without going near your trap. If you find any other holes in the tree plug them up with old dead limbs by driving them into the holes.

In the hollow log set place a couple of chicken heads inside the log as near the center as you can get them, then place a trap at each end of the log by sinking them down in the snow and covering over lightly as in previous sets. The best trap for weasels is a No. "O", that will spring very easy, for the weasel is very light, and has a very light tread. They are also very fast on their feet, therefore, the smaller the jaws on the trap the shorter space they have to travel to clamp on the weasels foot. This means a lot if the weasel is running when he hits the pan of your trap, for on the large jawed traps he can hit the pan and be off it before the jaws close fully. The time lapse between setting off the trap and the full closing of the jaws is too great in large jawed traps, when you find hair or the toe nails of a weasel in a trap, you can bank on it that he was running when he hit it, and escaped by a hair or a toe nail.

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA GAME COMMONWEALTH
Harrisburg, Pennsylvania

ESTIMATED RECEIPTS FROM SALE
OF FURS DURING THE SEASON
OF 1947-1948

Species	No. of Pelts	Estimated Total Value
Muskrats	389,382	\$1,025,318.48
Skunks	61,045	61,728.73
Minks	10,679	219,317.30
Opossums	39,344	13,371.19
Beavers	2,910	83,410.16
Otters	9	139.00
Raccoons	28,436	31,811.20
Weasels	18,807	27,126.08
Red Foxes	16,606	12,502.39
Gray Foxes	16,951	9,749.89
Wild Cats	15	11.50
Totals	584,184	\$1,474,736.03

amputates his foot and escapes. You can't get cash for a mink's foot, so make your drag light enough for the mink to move. Don't be afraid of your mink getting away; the weight of the trap and the drag will soon tire him out and leave a plain trail for you to follow and once tired out a mink will freeze to death very quickly. (And before you ruin a good mink pelt let me caution you here about trying to skin a mink that is frozen. If you catch a mink and find it frozen stiff don't try to skin it while it is frozen for the skin will tear very easy. Thaw it out before you start to skin it.) If the weather is snowy and windy your mink traps will have to be raised everyday if covered too deeply with snow. Spring them, reset them, and cover them lightly with snow again. If you are

BLACKCAT

By SAMUEL SCOVILLE, JR.

ABOVE the afterglow gleamed a patch of beryl-green. Etched against the color was the faintest and finest of new moons. It seemed almost as if a puff of wind would blow it like a cobweb out of the sky.

As the winter stars flamed into the darkening sky, a tide of night-life flowed and throbbed under the silent trees. One by one the wild-folk came forth to live and love and die in this their day, even as we humans in ours.

Long after the twilight had dimmed into the jeweled dark, from the inner depths of the woods there came a threat to the life of nearly everyone of the forest-folk. Yet it seemed but the mournful wail of a little child.

Fifty feet above the ground, from a blasted white pine, the plaintive sound again shuddered down the wind and from a hollow under an overhanging bough, a brownish-black animal moved slowly down the tree trunk. As he came out of the shadow he resembled a big, black cat with a bushy tail and a round, grayish head. Because of this appearance trappers have named him the blackcat. Others call him the fisher, although he never fishes, while to the Indians he is the pekan—the death-in-the-dark. In spite of his rounded head and mild face, the blackcat belongs to those killers, the weasels, and next to the wolverine is the most powerful of his family and far and away the most versatile.

Tonight, on reaching the ground, the pekan followed one of the many runways he had discovered in the ten-mile beat that formed his hunting-ground. Like most of the weasels, he lived alone. His brief and dangerous family life lasted but a few days in the fall of every year. When his mate tried to kill him, unawares, the blackcat knew that his honeymoon was over, and departed again to his hollow tree, many miles from Mrs. Blackcat.

Tonight, as he moved at a leisurely pace across the snow, in a series of easy bounds, his lithe black body looped itself along like a hunting snake, while his broad forehead gave him an innocent, open look.

There was one animal who was not misled by that expression. That one was a hunting pine marten, who had just come across a red squirrel's nest made of woven sticks thatched with leaves, and set in the fork of a moose-wood sapling some thirty feet from the ground. Cocking his head on one side, the marten regarded the swaying nest critically out of his bright black eyes. Convinced that it was occupied, with a dart he dashed up the slender trunk, which bent and shook under his rush.

The chickarees had craftily chosen a tree that would bend under the lightest weight, and signal the approach of any unwelcome visitor. Before the marten had covered half the distance, four squirrels boiled out of the nest and, darting to the end of the farthest twigs, leaped to the nearest trees





JACOB
BATES
ABBOTT

and scurried off into the darkness. The marten had poised himself for a spring when he saw the fisher gazing up at him. Straightway he forgot that there were squirrels in the world. With a tremendous leap, he landed on the trunk of a nearby hemlock and slipped around it like a shadow.

It was too late. With a couple of effortless bounds, the blackcat reached the trunk and slipped up it with the ease and speed of a blacksnake. The marten doubled and twisted and turned on his trail, and launched himself surely and swiftly from dizzy heights at arrowy speed. Yet, spring and dash as he would, there was always a pattering rush just behind him. Before the branches, which crackled and bent under the lithe golden-brown body, had stopped waving, they would crash and sag under the black weight of the fisher. With every easy bound the black came nearer to the gold.

The pine marten is the swiftest tree-climber in the world, bar one. The blackcat is that one. As the two great weasels flashed through the trees, they seemed to be running tandem. Every twist and turn of the golden leader was followed automatically by the black wheeler, as if the two were connected by an invisible, but unbreakable bond.

Under the strain, the nerves of the marten gave way. Not that he stopped, and cowered, helpless and shaking, like the rabbit-folk, nor ran frothing and amuck as do rat-kind when too hard pressed. No weasel, while he lives,

ever loses his head completely. Only now the marten ran more and more wildly, relying on straight speed and over-looking many a chance for a puzzling double, which would have given him a breathing-space.

The imperturbable blackcat noted this, and began to take short cuts, which might have lost him his prey at the beginning of the hunt.

(Continued on Page 24)

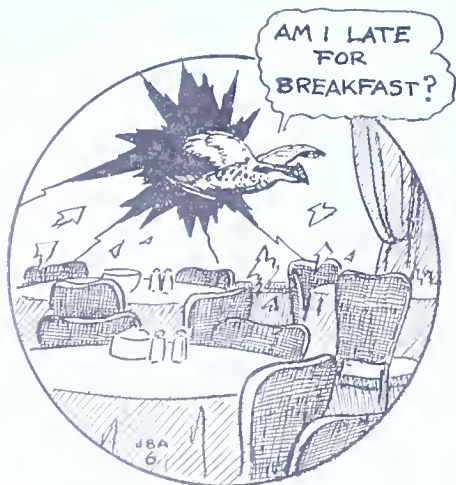




On the evening of October 20, I received a phone call from Edward Coen, Hendersonville. Mr. Coen said that he and two companions, Metro Boble and John Barbaryka, also of Hendersonville, had been hunting foxes with their hounds in Cecil Township, Washington County, when the hounds encountered a strange and ferocious animal in a wooded area. Upon investigating the commotion, the three hunters decided to capture the strange creature alive and take it home. With the aid of a good leather waist-belt and considerable wrestling, the animal was finally placed in a bushel basket and covered with a lid for removal to the town.

Mr. Coen told me that he believed the animal was a badger, although he was not sure. Upon my arrival, I found that the trio had captured a full grown badger which weighed approximately thirty pounds. Since this animal is a native of the Northwestern United States, we are anxious to know where this stranger came from. It is my belief that he either escaped from a traveling menagerie or else had been released by someone in that area.—Game Protector Glenn Kitchen, District G-11, Canonsburg.

A grouse crashed through a plate glass window approximately six by eight feet and a quarter inch thick at the Berris Restaurant, Main Street, Honesdale, on Wednesday, September 21st at 8:45 a. m. The bird made a hole in the center of the window that measured 20 inches in diameter.—Game Protector Ted Shafer, District B-6, Honesdale.



There were about one hundred ducks (Woodies and Blacks) on State Game Lands 183 last fall. These birds were raised on a series of beaver dams along Decker Creek. The beaver dams were planted with about 400 pounds of Wild Duck Millet which produced plenty of feed. Experimental plantings of other duck foods did not turn out too well.—Game Protector Duane Lettie, District B-10, Honesdale.

Turkeys apparently are much easier to call in the spring and early summer than in hunting season. Last June while traveling over Haney Hill, I noticed a turkey standing just off the road in the woods. I stopped and backed up the car to see if there were any young. The old turkey stood perfectly still, looking off into the woods. After watching her for some time and seeing no young, I chirped as nearly as I could imitate a turkey. She immediately turned around stretching her neck this way and that and started toward the car. Several chicks then appeared and started to follow the old hen. The old bird stopped and I tried to chirp again. This time my chirps were apparently the wrong kind of language because the old bird said "Cut it out" a couple of times and really took off. The small chicks disappeared as fast as they had appeared.—Game Protector Vern Van Order, District E-7, Wilcox.

While talking to a local farmer one day in August, we were seated on his front porch when he spotted a young rabbit coming out from under the front steps. He pointed it out to me and I craned my neck to see it. The rabbit was being pursued by a large weasel which drove the bunny under the house. The rabbit and weasel had no more than disappeared under the house when a large rat came tearing out. The farmer's dog which was tied beside the house grabbed and finished off the rat in about two shakes and my only lament was that it hadn't been the weasel. All this happened within ten feet of people engaged in conversation. When a weasel takes the trail, he apparently fears nothing or no place.—Games Protector Vern Van Order, District E-7, Wilcox.



On October 17th while releasing ringneck pheasants in Knox Township, I saw two crows acting very strangely. They were in a field and were jumping into the air making a noise as though they were hurt. They worked themselves out into an opening where I could see them plainly. There were four ringneck roosters after the crows. The ringnecks would work around the crows; then one of them would jump and strike a crow. They kept this up for some time. These ringnecks were not released birds.—Game Protector Ed Shaw, District F-16, Leeper.

I had something unusual reported to me this month, the finding of a ringneck pheasant nest with ten eggs on October 5th. The hen pheasant was attending the nest.—Game Protector Clyde Decker, District E-20, Philipsburg.

One day while on patrol in October, we noticed two very interesting grouse strutting and parading around in a little clearing along the road. Then all at once we noticed three more grouse standing around the edge of the clearing watching the performance. When I got out of the car, the three onlookers flew away but the two "strutters" just seemed to refuse to lower their ruffs until I almost touched them. I guess that is just a part of the grouse "crazy season" in October.—Game Protector Dean Lesnett, Huntingdon.





A RETRIEVING LESSON

By HERBERT KENDRICK

A GUN dog may be absolutely perfect in the way he works his cover, handles his game, responds to his master's commands, and possess all the qualifications required for a modern bird dog, yet if he does not retrieve, a substantial amount of the great glory of gunning is sadly lacking. In other countries the gun dogs are not permitted to retrieve and a field trial judge does not require a dog to bring in game.

The reasons stated by those who do not favor this art, are that retrieving slows up a fast dog, and seeking dead game is a waste of time when the dog should be moving ahead to find new birds. Another reason is the difficulty in keeping the dog steady to wing and shot when he can see the game fall before him. It is not easy to keep a dog steady, when you expect him to do retrieving, but it can be done if the hunter has his animal under control, trained correctly, and keeps himself under reasonable control when he kills game.

Possibly a hunt may be slowed a little when you require your dog to seek and find your game, but you love to *bag* game and you are a poor hunter indeed if you are careless about losing crippled or dead game. Retrieving is one of the fine arts of a well trained bird dog and the additional time taken for retrieving is certainly well spent.

There are a great many dogs that possess a natural tendency to retrieve and if your young dog happens to be one in that class the only need is to cultivate the good trait.

A rubber ball can be used to toss out in front of him, speaking the simple command to "fetch." When he brings it back to you, take it from him and reward him with an encouraging word.

Never allow the dog to feel that you are playing with him because one day he may not feel like playing and then all training effort is wasted. Encourage the instinct in the young dog to retrieve, practice this simple lesson and it will not take long for you to have a good natural retriever.

The major problem is with the dogs that do *not* start to retrieve naturally and must be force broken. The most efficient method of forcing a dog to retrieve is to procure a soft wooden dumbbell or corn cob, adjust a choke collar to the dog's neck, grasp the cord attached to the collar up near the ring with the right hand and hold the corn cob with the left hand in front of the dog where it is plainly visible. Command "Fetch" in just an ordinary tone, and accompany this command by a slight pressure on the choke collar. When the dog opens his mouth place the object in it very gently and lessen the pressure on the collar. Hold him with your left hand to keep his mouth closed on the corn cob. Caress him and make him proud of himself if he holds it well. Take plenty of time, and every few minutes force him to take it again. Continue this procedure daily until the dog will open up promptly when you give the "Fetch" command. Teach him to hold and carry it without dropping or mouthing it.

When he acquires this portion of this task, the next thing is to require him to step forward and grasp the object. Hold the cob

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SHOOT MORE AND SAVE YOUR SHIRT TAIL

By ED SHEARER

BIG game season has come and gone. Now the season of "post mortems" will be observed 'til fishing season brings relief to those tortured souls who lost their shirt tails in the big woods last year. Shirt tail snipping is a time-honored penalty for failing to produce the venison after the rifle crack is traced to your door. Argument and extenuating circumstances buy you exactly nothing. There is no escaping this nefarious practice.

It's either the scissors and a chilled posterior in the woods or they scorch your hide all winter long. I've been on both sides of this deal and it's a toss-up which is the worst. It's either your shirt tail or your ego—you can't win. And with due humility, I point out the moral of this article—"Either get better acquainted with your rifle or have a very old shirt handy."

"Sure," you say, "I don't want to hang up the gun. I like to shoot but look. I've a family and the candy days are over. Banging away at a dime a bang is not for me."

That's true, brother. Even reloading these days costs as much as factory loads before the war. Nor will shells come down much in the foreseeable future. Prices on guns and shells have jumped about one hundred per cent during and since the war.

But fortunately there is one branch of the shooting game you can indulge in without an Internal Department Revenue man looking over your finances. That is small bore shooting. "What?" you say. "That pipsqueak? That's for kids." But now let's you and me have a little talk about the facts of life—shooting life, that is.

The small bore school is the finest, fastest and best way to produce expert rifle and pistol shots that has ever been devised. The Army found that out years ago. Our National Rifle Association sponsored and developed it until at the present time, it's only rival is skeet and trap shooting. With ammunition at its present costs, it will no doubt pass them in the years ahead. Most of our greatest big bore shots are graduates of the small bore school.

I well remember the old days at Camp Perry. Every once in awhile one of the small bore clan would slip over and take a match away from the Armed Services. Like Ralph McGarrity swiping the Wimbledon, the "cream" 1000 yard match. And even the Marines never had any luck with the small bore deadeyes in their own backyard.

The small bore shooter learns what hard holding and squeezing the trigger really means. He acquires an expert knowledge of his sights and the size group his rifle shoots. But more important, the relation between his sights and the group on the target is obtained. He doesn't take a maul and drive his sights this way and that way, guessing where he will land. He deals with micrometer sights and when he wants to change his center of impact, he knows where it will strike. Accuracy is the small bore shooter's stock in trade.

How d'you go about this small bore business? Well, there are several ways. The best, if there is no NRA club in your vicinity,

(Continued on Page 23)

COMMISSION ACTIVITIES



Dr. H. E. Kilgus, a member of the Pennsylvania Game Commission, died at Williamsport at 4:45 P.M. on November 12. He was admitted to the Williamsport Hospital on October 7 while enroute to his home in Brockway from a Game Commission meeting in Philadelphia and underwent two serious operations thereafter.

His sudden passing stunned the residents of his home town and all who knew him for his industrial achievements, his many civic interests, and particularly for his generosity. Dr. Kilgus was prominent in religious, business and civic activities in northwestern Pennsylvania and was recently named "Catholic Man of the Month" by the Erie diocese. He was a life member of the St. Marys Lodge of Elks and would have begun his third six-year term on the Brockway school board in December.

Dr. Kilgus was born in Renova June 1, 1878 and was educated in the schools of that community. After a period of employment as a druggist, he studied

IN MEMORIAM



DR. H. E. KILGUS

medicine at Jefferson Medical College in Philadelphia and was graduated as first honor man of his class. He practiced medicine in St. Marys for a few years and then turned to the manufacture of clay products.

He married Miss Katharine Kaul of St. Marys whose family operated the Kaul Clay Company at Toronto, Ohio and subsequently Dr. Kilgus became president of the firm. In 1926 he transferred his business interests to Brockway when he founded the Brockway Clay Company. He was president of that concern until his death.

He was a member of the Brockway Sportsmen's Club and was considered one of the finest wing shots in the United States. His kennel of bird dogs was known throughout the State.

Dr. Kilgus was first appointed to the Game Commission on July 22, 1943 and was recently appointed to a second term by Governor Duff. With his death the Commission lost an independent thinker whose active interest in Pennsylvania's wildlife and work in behalf of both the landowners and the sportsmen was outstanding.

Over a thousand persons attended funeral services for Dr. Kilgus in Brockway on November 16. Internment was made in the St. Tobias Cemetery. Members of the Game Commission served as honorary pallbearers and a platoon of Game Protectors and state Fish Wardens acted as honor guard.

Wildlife Management Cuts Crop Damage

Replacing grassy fencerows with hedges of multiflora rose and bicolor lespedeza and the encouragement of benign predators can materially reduce mouse damage on a farm and simultaneously increase game and furbearer populations, the Wildlife Management Institute reports.

Mice may destroy as much as 50 per cent of corn shocked in fields and as much as 75 per cent of an alfalfa crop, Dr. Joseph Linduska, assistant chief of the U. S. Fish and Wildlife Service Branch of Wildlife Management recently stated. "Farmers," he said, "are apt to underestimate the damage done by mice because the casual observation of a few stalks of grain cut down or a few leaves of alfalfa nibbled are not taken as evidence of serious damage.

Quetico-Superior Booklet Available

Sportsmen who seek the wilderness seclusion of the Quetico-Superior roadless area, those planning canoe trips over its maze of waterways, and those interested in its preservation will be interested in a new booklet entitled "Geography of the Quetico-Superior Country," the Wildlife Management Institute believes.

Consisting of a bound reprint of an article by the late Dr. Wallace W. Atwood, president emeritus of Clark University, it is available upon request from the President's Quetico-Superior Committee, 919 North Michigan Avenue, Chicago 11, Ill. Illustrated with photographs and maps, it tells of the geological formation of the region and points up the need for preserving the area unspoiled for future generations.

Northeast Game Conference Meets in February

What promises to be the largest and most important meeting devoted to natural resource conservation to convene in the East this year will be held when the Northeastern Game Conference meets on February 2, 3, and 4 at Syracuse, New York, the Wildlife Management Institute reports.

Sponsored jointly by the Northeast Section of The Wildlife Society, the Northeast Association of Fish and Game Administrators, and the New York State Conservation Department, the conference will be held at the New York State College of Forestry. Two general sessions, three technical sessions, field trips, and a banquet are scheduled by the program committee, headed by Professor Ralph T. King, director of the Roosevelt Wildlife Station.



Handbook on Gun Club Cashiering

In every sportsmen's club there is at least one man who is "handy with a pencil" and knows something about accounting. Upon his shoulders always falls the duty, or task, of acting as cashier at every club trap or skeet shoot or shooting tournament the club may sponsor.

"This is really taking advantage of good nature," says Henry P. Davis, public relations manager, Remington Arms Co., Inc. "Mister Goodfellow gets the job because he is quick at figures and his fellow clubmembers shy away from cashiering a shoot on the grounds that it requires a lot of special technical knowledge. Remington Arms Co., Inc., has just produced a booklet which takes the so-called mystery out of gun club cashiering and eases the way for any intelligent clubmember willing to handle the cash and scoring."

All any interested sportsman has to do to receive a copy of the "Handbook on Gun Club Cashiering" is to write W. H. Foster, Jr., manager, trap and skeet section, Remington Arms Co., Inc., and ask for it. A companion piece to two previously published booklets (still available free) on gun club organization and operation, the handbook thoroughly covers every problem that confronts the gun club cashier. These include methods of taking entries, squadding, drawing off optionals, various money divisions, payment of purses and optional money and a list of do's and don't's for the gunclub cashier. The money division systems include Lewis Class, High Gun, Percentage, Jack Rabbit, Rose, and Optionals. Each system is discussed and explained in detail.

Holmesburg Fish and Game Protective Association

The Holmesburg Fish and Game Protective Association recently adopted a new and novel Membership Application blank. The new blanks are folded in three parts. The first section is filled out by an applicant and signed by a sponsor who must be a paid-up member of the club; then mailed with the fee to the secretary of the Membership Committee. The second section is a receipt which is returned to the applicant. The third part of the folder explains to the prospective member the club's facilities and outlines the procedure to become a member. The applicant must present himself in person for an interview by one of the membership committee.

Lebanon County Chapter, IWLA

The Lebanon County Chapter of the Isaac Walton League recently took time for an inventory of their accomplishments during the past year. Their program is a good indication of a live, progressive sportsmen's club. The following activities stood out: January—Erected 12 game shelters, distributed twenty bushels of corn for game food, trapped 131 rabbits, 43 by the Junior Organization, and stocked 112 rabbits secured from the State; February—Held a second annual Sportsmen's Show, Board of Directors met with County Commissioners to discuss establishment of a Soil Conservation District; March—Held an annual banquet, staged a fox hunt, stocked 48 cock and 8 hen pheasants received from the State; April—purchased 2800 forest trees for a local Scout Reservation which were planted by the Junior Organization and Boy Scouts, planted 250 multiflora rose seedlings, and planted 10 acres of corn on a local farm; May—revised Constitution and By-Laws, received 160 pheasant chicks for rearing; June—held annual fish fry, contributed to the Conservation Education Laboratory at State College; July—approved first budget in history of Chapter; August—members inspected a typical soil conservation project; liberated 59 ringneck hens and 72 cocks, raised at a cost of \$.63 each; September—refuge maintenance on Nelson farm, elected officers for 1950; October—Held annual field day, distributed 1,000 sportsman's and 1,000 safety zone posters to local farmers, exhibited game, forest and soil conservation motion pictures to farm groups; November—Organized a Junior and Senior forest fire crew; December—Annual Christmas party.



Scranton Times Photo.
The Lackawanna County Federation of Sportsmen's Clubs held its largest and most enthusiastic annual booster rally in 18 years in October when more than 450 members and friends gathered in Scranton. Shown here are, first row, left to right: Paul Bittenbender, Fish Commissioner; Jack Neiger, Federation President; Ben K. Williams, Game Commissioner; and Tony Colucci, Federation treasurer. Second row, left to right: Frank Galonis, Federation secretary; Watkin Phillips, Federation vice-president; Phil Sloan, Game Protector; Steve Emanuel, chairman, Northeastern Division; Carl Stainbrook, Division Supervisor; and Charley Nehf, editor of the "Federation News."

Four-H Clubs Train 10 Million Conservationists

An amazing total of 10 million boys and girls, parents, and local leaders have participated in one or more conservation projects on their home farms since the 4-H Club conservation program, in cooperation with the Agricultural Extension service, was introduced 16 years ago, according to the Wildlife Management Institute.

A NEW youth conservation group which boasts of members in several states and in Canada, was organized a year ago last November in English Center, Pennsylvania. Originally intended as a vehicle for furthering principles of conservation among young people, Wildlife has opened its doors to membership of adults who wish to aid in promoting a wider understanding of the obligations of youth in conservation of natural resources.

Membership rolls at the present time list 150 members, and include the names of Fred Mills, National Director of the Boy Scouts of America; C. Stewart Comeaux, Secretary of the Sporting Arms and Ammunition Institute; John B. Rishell, Principal of Elementary Schools of Denver, Colorado; and Maurice Phillips Tracy, President of the Guide Association of New Brunswick, Dominion of Canada. The youngest member is 11 years old, and the oldest is 87. Plans are underway to incorporate the club when membership has increased sufficiently.

Realizing an urgent need for proper education and guidance of those who will one day assume leadership of civic and sporting organizations of their community—the young people—Fred Bowles organized the club known as Wildlife. He wanted to provide a means whereby young people could be guided and instructed by adults with the benefit of years of experience. He wanted to insure that the wanton exploitation of wildlife resources in years past when it was thought that their numbers knew no bounds, would be replaced by a more carefully planned practice of harvesting only the surplus annually.

WILDLIFE



Meetings are held at the club headquarters in English Center on the 5th of each month. Each formal gathering is devoted to a discussion of a particular phase of the pledge that all members take upon admission. Officers of the club have secured the services of numerous authorities and specialists to speak to the members at their monthly meetings. Ornithologists, game management experts, fisheries management technicians, and arms experts, to mention a few, have given talks and demonstrations to club members.

Under the auspices of the National Rifle Association a Wildlife Ranger Junior Rifle Club has been formed. Boys and girls 12 to 18 years of age are eligible to qualify for N.R.A. Ranger brassards by firing a quali-

fying score with a .22 calibre rifle. All range firing exercises are supervised by competent N.R.A. commissioned instructors. A regulation Junior fifty foot outdoor range of ten firing points has been constructed on the club grounds. A full schedule of practice firings and instruction is planned for the summer and fall. State Game Protector Robert Sinsabaugh of English Center often assists on the range by helping supervise and instruct.

The objectives which each member seeks to attain are contained in the pledge which is a part of the obligations of the obligations of membership. The pledge itemizes the following:

1. Fifty cents for membership dues annually.
2. Feed wildlife at least one bushel of grain per year.
3. Erect at least one bird house per year.
4. Obey all state and federal fish and game laws.
5. Learn and practice the art of handling firearms legally and safely.
6. Surrender my membership to Wildlife upon revocation of hunting or fishing license for violation of fish and game laws.
7. Pledge allegiance to State and Country.
8. Help to prevent forest fires.

Charter officers of the club are:

President Fred L. Bowles
Vice-President Leroy S. Gleason
Treasurer Blanche Wagoner
Executive Officer Robert Sinsabaugh, Jr.
Chief Ranger William Suders

Major Bowles welcomes new members from among the young people of the country. Applicants for membership in Wildlife are requested to write to the president, in English Center.

BOOK NOTES

SLED DOG—Charles E. Gillham. Standard Publications, Inc., 910-914 Fifth Ave., Huntington, West Virginia. Price—\$3.00

For those who enjoy a good story and those who appreciate verse, here is a down-to-earth story of pioneering, loneliness, hardship in the lives of men who face raw nature on the fringe of an outer world. Author Gillham's other books, "Raw North," "Beyond the Clapping Mountains," etc., are classics in sturdy prose and are treasured in libraries of outdoorsmen around the world; this is the first printing of his poetry. Charlie actually did not write these poems for publication and they were written in Eskimo igloos when blizzards howled over the pack ice or in makeshift lean-tos on many a northern trail. They were written as an outlet for feelings too often confined by the lifeless, unemotional expanses of the arctic circle and for that reason, will remain forever valuable insights into the savage beauty and rugged splendor of the North. They should be read and enjoyed by every sportsman from the Aleutians to "Little America."

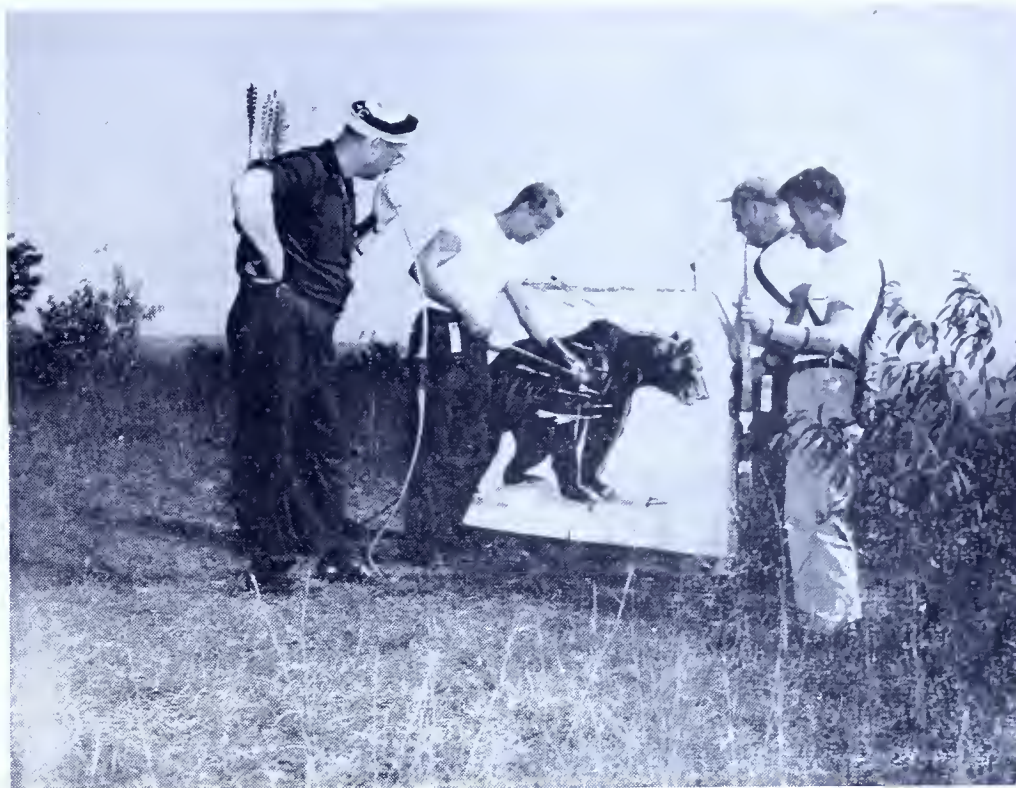


Famed as the greatest pointing exhibition dog in the United States, Citadel's Fairview Spot, shown above, is owned and handled by Bert Ackerman, Altoona. The dog is noted for his imitations of famous dogs on point and for humorous variations of mimicry. Spot is 4 years old and arrangements for an exhibition can be made through Mr. Ackerman, 2011 10th Street, Altoona.

Archers Urge Special Season

Using every available medium to empha-

size the conservation benefits of hunting with a bow, the Pennsylvania State Archery Association is conducting a widespread campaign to secure for bow hunters a special archery season for big game next year. Archers point out that numerous states have set such seasons and the army of "Robin Hoods" is rapidly swelling across the nation. Association secretary Clayton B. Shenk, Lancaster, reports that special archery seasons were in effect last year in Arkansas, California, Colorado, Idaho, Kentucky, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Oregon, and Wisconsin. Michigan set a special season for male deer and bear from October 1 to November 5, New Jersey held a 5-day special archery season in December, and New York staged a special season in the Allegany State Park 14 days prior to the regular season in addition to setting aside two preserves for the bowmen.



L. W. Keen, Middletown; Bob Kendig, Lebanon, Les Newell, Sharon; and E. H. Branten, Pittsburgh, practice up for live-shooting at the Mid-Atlantic States Field Archery Championship, Pine Grove, in October.

SHOOT MORE—from Page 19

is to write to the National Rifle Association, Barr Building, Washington, D. C. They will give you the address of the closest affiliated club.

The second way, in case no established club is convenient, is to form your own. It requires a minimum of ten members. The fee is ten dollars per annum for the club to affiliate with the N.R.A. and you will receive a nationalized charter. The privilege of qualifying for regular army marksmanship decorations will also be yours. The club may also compete in the nation-wide matches conducted by the N.R.A. Targets, ammunition, etc., may be purchased directly from the Department of Army at government cost and you also receive a copy of the American Rifleman magazine as well as all bulletins pertaining to shooting.

The third way is to become an individual member. To qualify, you must be indorsed by a N.R.A. member, National Guard authority, or your local police. The price is three dollars per year. You may buy direct from the Department of Army certain military arms and ammunition at very low cost. Also, you may compete in any matches throughout the year conducted by the N.R.A. Every rifle and pistol shooter should be an individual member.

The fourth way is to go it alone or with two or more fellows who are content with much or little as long as they're burning powder. The big qualification in this class is the ability to contrive something out of nothing. The one advantage of this system is that you can make your own rules and shoot as you darn please. This makes for a lot of fun sometimes, but it doesn't add to your ability as a rifleman. To be a good shot you must have a good, sound system and follow it. However, it can be done alone just as well as in a big club with modern expensive ranges. Let's see how a fellow going it alone could make out.

The first thing you "gotta" have is a place to shoot. You can foul up the wife's kitchen with bullet molds, loading blocks and shells but you better find some place else to unload 'em. Let's look at the cellar. If you have thirty feet, you're in! If you can scrape fifty feet, you're in luck. Then you can use standard targets and with proper witnesses you can fire in the N.R.A. postal matches and have a yard stick with which to measure your progress.

Now go to the junk yard and get a piece of boiler steel one quarter inch thick. Don't be too skimpy on the size. I did once and missed the plate but scored a bullseye on five jars of blackberry jam and wound up in a crock of pig's feet. Put up the plate so that it slants downward at an angle of 45 degrees. Put a box of sand under it to catch the bullet splash. Now put a light on an extension cord with something to act as a light reflector and you're set up for business. Stay as near to the standard sized target as your range will allow. Most any sporting goods store has targets or can get them for you. They are quite inexpensive.

Now in regards to rifles, since we're not trying to make a champion in three easy lessons, I'm going to group them in two general classes.

Class One comprises rifles using the .22 cal. long rifle cartridge, rim fire, having modern sights adjustable to not less than a half minute of angle. Full size modern stocks with sling swivels and sling also belong in this class. The front sight may be post or aperture, though the latter is to be preferred. The weight will run from eight to twelve pounds. The price range from what I have seen recently runs from a little better than forty dollars to as high as you want to go. With any of these rifles you are equipped to attain expert rifleman.

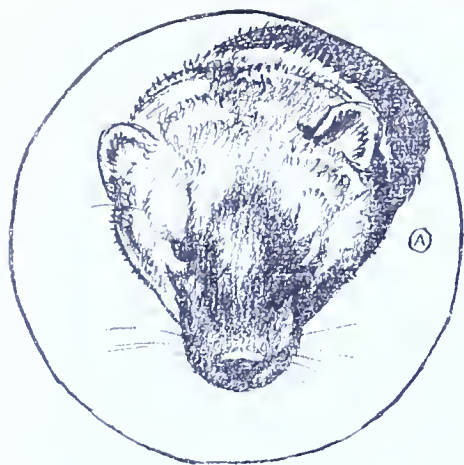
Class Two includes light rifles weighing from four and a half to six pounds. They have sights not permitting fine adjustment and undersized stocks. These rifles are suitable for boys and general short range shooting, plinking at cans, etc. These rifles are lots of fun and generally inexpensive to buy. Cost—about fifteen dollars up. However, they will not take you far down the road to expert rifleman.

In this space I cannot go beyond generalities. If you want more, write in and I'll be glad to go into it deeper. Now, let's start shooting. Lay right down on your tummy. That's what I said. No Natty Bumpo stuff for you. The first thing you have to learn is to hold steady. The second thing is to squeeze the trigger. The third thing is to do both at the same time. Until you can do this, the sights are not much good to you. So it's groups we are after and the prone position is the fastest way to get them.

Here's the position. Adjust the sling so it is well up on your arm and fairly tight. Half face to right of target; then lie down on your stomach, placing the body and elbows at an angle of 45 degrees to the target. Never head on. Legs spread well apart, hugging the ground closely. The left elbow (if right handed) should be at a point nearly under the rifle. Let the forearm of the rifle rest well down in the palm of your hand; don't grip it with the fingers. Then relax. You'll be uncomfortable enough till you get used to it. A week at half an hour a day should see you holding fairly steady.

When you can average 90 or better, take up the sitting position which is quite useful in the woods. When you are averaging 85 or better, then you can take up the off-hand position. By this time you have learned to hold and squeeze. You have learned to adjust your sights and are ready for the most difficult of all positions.

What is good off hand shooting? When you can average 80 or better, you've not only put in a lot of conscientious work but you're more or less gifted in coordination. Moreover, your shirt tail, barring downright misfortune, should remain intact.



BLACKCAT—from Page 17

At last, after a long and circling chase, the blackcat overtook the marten at the foot of an enormous white pine. With a snarl and a lightning-like snap the marten tried for the favorite throat-hold of the weasel-folk. He was battling, however, with one quite as quick and immeasurably more powerful than himself. With a little bob the blackcat slipped the lead of his adversary, and the flashing teeth of the marten closed only on the loose tough skin of the fisher's shoulder. Before he could strike again the blackcat had the smaller animal clutched in his claws, with no play to parry the counter-thrust of the black muzzle. In another second, the life of the marten passed out under the fierce jaws of the fisher.

His first blood-thirst slaked, the ranging blackcat came upon the fresh tracks of a snow-shoe rabbit in the soft snow.

The blackcat settled doggedly down to the chase. Although far slower in a straightway run than either the hare or the fox, it can and will run down either in a long chase, although it may take a day to do it. Tonight the chase came to a sudden and unexpected end. The hare described a great circle nearly half a mile in diameter, at full speed, and then, whiter than the snow itself, squatted down to watch his back trail and determine whether his pursuer was really intending to follow him to a finish. Before long, the squatting hare saw a black form on the other side of the circle, with humped back looping its way along. At such a sight the smaller cottontail rabbit would have run a short distance, and would then have crouched in the snow, squealing in fear of its approaching death. The hare is made of sterner stuff. Moreover, this one was a patriarch fully seven years old—a great age for any hare to have accomplished in a world full of foes.

Wabasso, as Hiawatha named him, had not attained to this length of years without encountering blackcats. In some unknown way, probably by a happy accident, he had learned the one defense which a hare may interpose to the attack of a fisher, and live. Reaching full speed almost immediately, he cleared the snow in ten-foot bounds, four to the second, while the wide, hairy snow-shoes, which nature fits to his white feet every winter, kept him from sinking much below the surface.

The keen eyes of the blackcat caught sight of the hare's first bound in spite of his protective coloration, and he at once cut cross the diameter of the circle. In spite of this short cut, the hare reached the bank of an

open river many yards ahead. Well out in the midst of the rushing icy water lay a sand bar, now covered with snow. To the blackcat's amazement and disgust, and contrary to every tradition of the chase, this unconventional hare plunged with a desperate bound fully ten feet out into the icy water. Wabasso was no swimmer, and had evidently elected to travel by water in the same way which he had found successful by land. Kicking mightily with his hind legs he hopped his way through the water, raising himself bodily at every kick, only to sink back until but the top of his white nose showed. Nevertheless, in a wonderfully short time he had won his way through the wan water, and lay panting and safe on the sand bank. If pursued, he could take to the water again and hop his way to either shore, along which he could run and take to the water whenever it was necessary.

Tonight, no such tactics were needed. The fisher, in spite of his name, hates water. He can swim, albeit slowly and clumsily, in the summer time. As for leaping into a raging torrent of ice-cold water—it was not to be considered. The blackcat raced up and down the bank furiously, and not until convinced that the rabbit was on that snow bank for the night, did he give up the hunt and go bounding along the bank of the river after other and easier prey. For the first time that night the mildness of his face was marred by a snarling curl of the lips, showing the full set of cruel fighting teeth with which every weasel, large or small, is equipped.

As the blackcat followed the line of the river, his sharp ear caught a steady and monotonous sound, like someone using a peculiarly dull saw. Around a bend the still water was frozen. Against the side of the bank an empty pork-keg had drifted down from some lumberman's camp, and frozen into the ice. In front of the shattered keg crouched a large, blackish, hairy animal, gnawing as if paid by the hour. It

was none other than the Canada porcupine—"Old Man Quillpig," as he is called by the lumberjacks, who hate him because he gnaws to sawdust every scrap of wood that has ever touched salt. The porcupine saw the blackcat, but never ceased gnawing. Many and many an animal has thought that he could kill sluggish, stupid Quillpig. The wolf, the lynx, the panther, and the wildcat all have tried—and died. So, tonight, the porcupine kept on with his gnawing, under the star-shine, convinced that no animal that lived could solve his defense.

But the blackcat is one of two animals which have no fear of the quillpig. Black-bear is the other. With its swift, sinuous gait, the pekan came closer, whereupon Quillpig unwillingly stopped his sawing and thrust his head under the broken, frozen staves of the barrel. His belly hugged the ground, and in an instant he seemed to swell to double his normal size as he erected his quills and lashed this way and that with his spiked tail. Pure white, with dark tips, the quills were thickly barbed down to the extreme point, which is smooth and keen. The barbs are envenomed, and wherever they touch living flesh cause it to rankle, swell, and fester for all save the pekan, whose flesh is immune to the virus.

Tonight, the blackcat wasted no time. Disregarding the bristling quills and the lashing tail, the crafty weasel suddenly inserted a quick paw beneath the gnawer, and with a tremendous jerk tipped him over on his bristling back. Before the quillpig could right himself, the fisher had torn open his unguarded belly, and proceeded to eat the shivering, flabby meat as if from the shell of an oyster, or to be more accurate, a sea urchin.

As the pekan ate and ate, the stars began to dim in the blue-black sky, and a faint flush in the east announced the end of his hunting day. With a farewell mouthful, he started back through the snow for his hollow tree.



Early reports indicate a 1949 bear kill of about 400. Here is a Pennsylvania bruin bagged by Dr. A. B. Cimoehowski, Forest City, on the first day of the season last year.

A RETRIEVING LESSON—from Page 19

in front of the dog, command to "Fetch" and at the same time exert a little pressure on the check cord in a forward direction thus helping him move toward the object. Continue this until he will step forward promptly and grasp the cob when he is ordered to "Fetch."

At an early stage of his training he may be reluctant to release the corn cob. Do not pull it from him by force. Simply take hold of it, command, "Give" and if he refuses press his lips against his teeth or step on his front toes. Apply only enough pressure to make him open his mouth. After a few times he will surrender it when you give the order.

Next the dog must be taught to pick up the corn cob from the ground. This can be easily accomplished by lowering it a few inches at a time and giving the same orders as before. When he becomes familiar with these new lessons, and has mastered them, the cob may be tossed a few feet in front of him, and ordered to "Fetch." If he hesitates to move forward give him a jerk with the check cord and repeat the order. Continue this until he will retrieve the object reliably and promptly without the use of the collar. Make sure he delivers it back to you every time he retrieves.

Now he is ready to work on a dead bird. If he shows a tendency to be hard mouthed, tie a few nails around the bird. He will not press when the metal touches his teeth. When he shows that he can carry it lightly, remove the nails, and reward him for his performance.

After you feel he is thoroughly force broken, continue the lessons for many weeks so that his training will be so imprinted upon his memory that disobedience or shirking will never enter his mind.



Hal Harrison Photo.

Portrait of a Champion, Sam L's Skyhigh, Grand National Grouse Dog Champion, the highest honor that can be won by a bird dog in ruffed grouse competition. Handled by Larry Tuttle, Johnsonburg, "Jim," as the champion is called, defeated 32 of the country's best grouse dogs in November and became the third Pennsylvania dog in history to cop top honors in this field trial classic.

LIVING FENCE—from Page 5

favorable temperature and aeration conditions for the rose root system. Incidentally, fall planting—or winter planting, if the soil is open—will gain a half year's growth over planting a fence the following spring. Pruning the seedlings roots to an eight-inch length and cutting the tips back to three or four inches is a factor in rapid and effective planting and makes for a well-balanced plant.

Recently devised tree planting machines are being used by the Illinois Department of Conservation and commercial planters in Illinois for rapid fence planting; while in Missouri planting in a plow furrow, closing with another furrow and firming with the tractor wheel is a popular planting method.

While planting a multiflora fence is simple enough, just as planting a field of corn is simple, it is as futile to neglect proper land preparation, planting and cultivation with one as with the other. Intense, energetic Harold Terrill, game chief of the Missouri Conservation Commission says: "We can grow a multiflora fence that will turn horses and cattle at the end of three years on any soil type in Missouri. But on many soils a good application of manure plus superphosphate (or high phosphate fertilizer) must be applied prior to preparing a wide planting strip by plowing

deep and harrowing. After the seedlings are planted, on tight or droughty soils, a heavy mulch over the planting strip is a must."

Commercial nurseries, which have long grown multiflora roses by the millions as understock for garden roses, are in a position to rapidly meet demands for fence-planting stock. In fact, some nurseries are already specializing in this field. The Soil Conservation Service figures that, at current commercial prices, the cost of establishing a 100-rod multiflora fence with plants spaced one foot apart is \$105.85.

Some care must be used in procuring planting stock. Multiflora rose is a species of great variability. It comes thornless and thorny; upright, spreading and even trailing. Some types are more vigorous than others. For fences, it is essential to select a thorny, vigorous type, upright but with branches recurving to form a dense growth from the ground up.

There are numerous locations where the multiflora rose fence isn't practical, just as there are numerous others where it is. Farmers and soil conservationists are rapidly finding the places where it is most useful. This vigorous stand-by of the floral industry has definitely jumped the garden wall and bids fair to assume a significant role in the land pattern of American farms.

OUTDOOR KIDS—from Page 7

to the suet, but the downy woodpeckers and the nuthatches were enjoying this fat placed there for them.

"There's something funny," Jane suddenly exclaimed. "See that woodpecker on the soap-dish suet feeder? He has a red spot on his head. Now look at the downy on that piece of suet tied to the spruce. He doesn't have a red spot. I wonder why," Jane mused.

"That's an easy one," her brother told her. "The woodpecker in the spruce tree is not a 'he.' You see, Jane, Mrs. Downy Woodpecker does not wear the red spot. Just Mr. Woodpecker. And that's true of downy's big cousin, the hairy woodpecker, too."

"Oh, look at those two song sparrows fighting on the feeding log," Jane cried, interrupting Billy's explanation of woodpeckers.

"You'd better look again," Billy answered. "The one

on the right is not a song sparrow."

"Gee, that's right," Jane admitted. "It has only that one big spot on its breast. It's a tree sparrow. I just looked at the streaked breast of the other bird and thought they were alike."

The children continued to watch the birds for some time. They had placed their feeding stations in the yard early in the fall and the birds had learned where they always could find food. Cracked corn, scratch feed, sunflower seeds, table scraps and suet were offered continually, and when the big snows finally came, that yard was alive with winter birds of all kinds.

"We're lucky, Billy, we have the birds in our yard all year 'round," Jane cried as the youngsters left the window and started to dress for other fun in the snow.

LICENSES AND PERMITS

There is a constant demand for information concerning hunting licenses and the various kinds of special licenses and permits issued by the Game Commission. So often it is necessary to search through the Game Law for this information. It is not always clear where to obtain these licenses and permits nor their cost. We are publishing below a compilation of the most common ones authorized under the Game Law.

Through the courtesy of the Fish Commission we are also giving a list of the most common licenses authorized by the Fish Law.

Service men and disabled veterans have been given special consideration by the Legislature of Pennsylvania in being issued hunting and fishing licenses.

Certain special permits may be issued at the discretion of the Game Commission under various conditions and limitations.

Further details concerning any of the licenses or permits may be secured from either the Game Law or the Fish Law of Pennsylvania.

BARE FACTS—from Page 6

this has been proven as I've seen many hibernating females in the den with the young of the previous year, but in no instance have I ever seen a female in a den with her old cubs and newborn young. Bears during hibernation, are in a heavy stupor but they do sense what's going on around them. In many cases if disturbed or molested, they will leave their den even in the dead of winter and under similar circumstances the female will desert her newborn young.

One day late in January, I was going through some heavy timber, on a mountain-top and upon glancing to my left, I saw the outline of a bear's head. I figured that it had been disturbed by my approach so I backed away carefully and the next day returned to the scene where I found a huge bear hibernating in a pile of leaves. On this visit and on several subsequent visits, although I went quietly and in rubber pacs, the bear was always awake and watching me carefully as I could see the glint of light in its eyes.

On another occasion late in winter while running a trapline for bobcats on a mountain ridge, I jumped from one snow covered boulder to another and when I landed I heard a low growl behind me. There under one of the boulders was a female bear, very much awake, watching me and growling deep in her throat. Evidently, when I jumped, I kicked some snow down on her and she was simply letting me understand I should be more careful; later, I saw two cubs in the den with her and they were from the previous year's litter.

Possibly the most interesting of all our wild animals, the bear, has been doing well in Pennsylvania. Short seasons and careful management has made the animal quite common again. His tendency to raid beehives and occasionally kill sheep and cattle has made a black mark against him but good or bad he always gets lots of attention and remains a grand trophy for the sportsman.

HUNTING LICENSE AND MISCELLANEOUS LICENSE, PERMIT AND TAG FEES

Kind:	Cost:	Where Obtainable in Pennsylvania:
Resident Hunting License	\$ 3.15	Dept. of Revenue, Misc. License Section, Harrisburg County Treasurers Issuing Agents throughout Penna.
Resident Hunting License (Resident disabled veteran of any war—with service incurred loss or loss of use of one or more limbs ..	Free	County Treasurers
Resident Hunting License (for duration of World War II, may be issued to any person now in armed forces as follows: (1) bona fide resident of Pennsylvania; and (2) residents of any State officially stationed within the Commonwealth thirty or more days next preceding his application)	Free	County Treasurers
Non-resident Hunting License (does not include trapping)	20.00	Dept. of Revenue, Misc. License Section, Harrisburg County Treasurers
Non-resident Trapping License (does not include hunting)	25.00	Bounty Claims Section, Game Commission, Harrisburg
Alien Non-resident Hunting License (trapping prohibited)	20.00	Dept. of Revenue, Misc. License Section, Harrisburg
Replacement of Lost License and Tag (required when either the license or tag, or both, are lost)	1.00	Dept. of Revenue, Misc. License Section, Harrisburg, or agent who issued original license.
Antlerless Deer Permit (issued only when the Commission declares an open season for killing antlerless deer under permit to restrict number of hunters)	1.00	Game Commission, Harrisburg
Archery Permit (required for special archery preserves only)	2.00	Game Commission, Harrisburg, or Wildlife Conservation Division Offices (Field).
Ferret Breeder's or Dealer's Permit	25.00	Wildlife Conservation Division Offices (Field).
Ferrett Possession Permits	5.00	Wildlife Conservation Division Offices (Field).
(for each ferret)		
Fur Dealer's Permit (Non-resident)	100.00	Wildlife Conservation Division Offices (Field).
Fur Dealer's Permit (Resident)	10.00	Wildlife Conservation Division Offices (Field).
Fur Dealer's Employees' Permit (Resident)	5.00	Wildlife Conservation Division Offices (Field).
Fur Farming Permit	5.00	Wildlife Conservation Division Offices (Field).
Game Propagation Permit	5.00	Wildlife Conservation Division Offices (Field).
Metal seal to tag imported game for sale, excepting deer or rabbits (1 attached to each carcass)	.05	Wildlife Conservation Division Offices (Field).
(each)		
Permits for Field Trials (not to exceed 5 consecutive days)	5.00	Wildlife Conservation Division Offices (Field).
(each trial)		
Permits for Fox Hunting Clubs	50.00	Wildlife Conservation Division Offices (Field).
Permit for Retriever Trial	10.00	Wildlife Conservation Division Offices (Field).
(for each day)		
Permit to possess flesh of game animal or bird for additional period not exceeding 6 months beyond legal 60-day limit	1.00	Game Commission, Harrisburg; Wildlife Conservation Division Offices (Field); or District Game Protectors.
Permit to possess pelts and have a protected bird or animal mounted	1.00	Wildlife Conservation Division Offices (Field).
(if accidentally killed)		

HUNTING LICENSE AND MISCELLANEOUS LICENSE, PERMIT AND TAG FEES

Permit to ship trophies to taxidermists outside of Pennsylvania, for tanning or mounting, and return to owner	Free
Raccoon Possession Permit	Free
Regulated Shooting Grounds Permit	25.00
(For first 100 acres)	
(For each additional 100 acres)	5.00
Roadside Menagerie Permit	5.00
Scientific and Museum Collecting Permit ..	5.00
Special Dog Training Area Permit	10.00
Tags for beaver hides	.10
(each)	
Tags for shipping raw furs to fur dealers of other states	.25
(each)	
Taxidermy Permit	25.00

Wildlife Conservation Division
Offices (Field).
Wildlife Conservation Division
Offices (Field).
Wildlife Conservation Division
Offices (Field).
Wildlife Conservation Division
Offices (Field).
Game Commission, Harrisburg
Wildlife Conservation Division
Offices (Field).
Wildlife Conservation Division Offices
(Field), or District Game Protectors.
Game Commission, Harrisburg; Wild-
life Conservation Division Offices
(Field), or District Game Protectors.
Wildlife Conservation Division
Offices (Field).

FISHING AND MOTORBOAT LICENSE FEES

(Information furnished through the courtesy of Pennsylvania Fish Commission,
Harrisburg, Pa.)

Kind:	Cost:
Resident Fishing License	\$ 2.00
(plus 10c agent's fee)	

Where Obtainable in Pennsylvania:
Dept. of Revenue, Misc. License Sec-
tion, Harrisburg; County Treasurers;
or Issuing Agents throughout Penn-
sylvania.

Resident Fishing License (Resident disabled
veteran of any war, with service-incurred
loss or loss of use of one or more limbs,
or totally blind)

Free

County Treasurers.

Resident Fishing License (For duration of
World War II, may be issued to any per-
son now in armed forces as follows: (1)
bona fide residents of Pennsylvania; and
(2) residents of any state in service within
the Commonwealth sixty days next pre-
ceding his application)

Free

County Treasurers.

Non-resident Fishing License

Reciprocal

Dept. of Revenue, Misc. License Sec-
tion, Harrisburg; or County Treas-
urers.

Non-resident Fishing License (May be issued
to any person from another state serv-
ing in the armed forces during any part
of the war in which the United States is
now engaged—World War II—and who is
being hospitalized, or is in a convalescent
camp within the Commonwealth)

Free

County Treasurers

Tourist Fishing License (Valid for 5 con-
secutive days)

2.00

Dept. of Revenue, Misc. License Sec-
tion, Harrisburg; or County Treas-
urers.

(plus 10c agent's fee)

Duplicate Fishing License (if original cer-
tificate is lost or destroyed)

Free

Dept. of Revenue, Misc. License Sec-
tion, Harrisburg; or County Treas-
urers.

(by making affidavit)

Duplicate Fishing Button (if original is lost
or destroyed)

Facsimile

can be made by licensee.

Duplicate Fishing License and Button (in
case both are lost or destroyed)

.50

Dept. of Revenue, Misc. License Sec-
tion, Harrisburg; County Treas-
urers; or any authorized Issuing
Agent in Pennsylvania.

(Affidavit should accompany fee)

Artificial Propagation Licenses:

Trout and Bass	\$25.00
Gold Fish	5.00
Other Species	5.00
(each)	
Motorboat License	1.00
(For each cylinder of the motor or \$2.00 for an electrically propelled boat)	

Fish Commission, Harrisburg
Fish Commission, Harrisburg
Fish Commission, Harrisburg

Dept. of Revenue, Misc. License Sec-
tion, Harrisburg.

THE MUSKRAT—from Page 3

The exception mentioned above is the round-tailed muskrat (*Neofiber alleni*) and its discovery in 1884 was one of the astonishing events in modern natural history. Less than half as big as the common muskrat and confined to southern Georgia and the Indian River district of Florida, it has a round, rat-like tail and looks like an overgrown, dark brown field mouse. Dr. Francis Harper estimated that the Okifinokee Swamp, alone, contained at least 10,000 round tails. How such a locally abundant animal could escape naturalists' identification for so long is amazing.

Pennsylvania's intelligent trapping laws efficiently carry out the U. S. Department of Agriculture's advice to trappers: "The muskrat pelt taken in October and November is worth hardly half as much as if trapped in February. Trappers are often careless of their own interests, and, in their eagerness to forestall competitors, take the field far too early. . . . Muskrats within the United States should not be trapped before December 15; and while the fur is still prime in the latter part of March, the breeding season is then on, and continued trapping would greatly limit the number of animals for the next season. . . ." Pennsylvania's legal muskrat season runs from January 1 to February 1.

Floods and a severe drought in 1946 were destructive to the muskrat population in Pennsylvania and their numbers remained somewhat depleted through 1947. Last June the Pennsylvania Trappers' Association, at their 12th annual meeting at Big Spring Park, "voiced concern over the decrease in the muskrat population and considerable thought was given toward recommending a closed season on this valuable fur bearer."

Porcupines have been known to nibble on dynamite for the small amount of salt it contains.

The purple finch is not at all purple. The male is of an old-rose color and the female has the general sparrow-like appearance.

Muskrats (marsh hares in Louisiana) prefer swimming to walking.



GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred).

Cases Settled During the Month of October 1949

ADAMS—\$260

Hertz, Charles Anthony, Rt. No. 1, New Oxford. Attempting to kill wild duck in close season	\$ 20.00
Lawrence, Burnell Francis, Rt. No. 1, New Oxford. Killing wood duck in close season	20.00
Prosser, Raymond Junior, R. D. No. 1, York Springs. Hunting without resident license	20.00
Shindledecker, Charles, R. D. No. 1, Orrtanna. Possession of deer illegally taken	100.00
Shindledecker, Glenn M., R. D. No. 1, Orrtanna. Aiding in concealing deer illegally taken	100.00

ALLEGHENY—\$495

Altman, Charles Howard, Box 111, R. D. No. 3, Gibsonia. Attempting to kill ringneck pheasant in close season	25.00
Asperger, Catherine, R. D. No. 1, Baden. Dumping rubbish on State Game Land	25.00
Bruno, August, Indianola. Possessing ringneck pheasant in close season	25.00
Campbell, Robert, Presto. Assisting to kill a raccoon in close season; Hunting without resident license	45.00
Choka, John Steven, 1417 Fleming Ave., Pittock. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M.	25.00
Durish, Joseph Henry, 2700 Crosby Ave., Pittsburgh 16. Hunting groundhogs in close season	10.00
Filoviat, John, R. D. No. 1, Finleyville. Possessing rabbit in close season	10.00
Gentile, William Santo, 11709 Beech St., Turtle Creek. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M.	25.00
Grippio, Daniel Mark, 1216 Brighton Road, Pittsburgh 12. Training a dog while carrying a rifle	10.00
Johnson, William Elbert, Box 57, Hickman. Killing a raccoon in closed season; Transporting a raccoon killed in close season	50.00
LaGorga, James Joseph, 630 Airbrake Ave., Wilmerding. Training a dog on game while carrying shotgun	10.00
Lee, Ray Edward, 334 Third St., Pitcairn. Lending resident hunting license to another	20.00
Mathews, Charles Raymond, 507 Alpine St., Pittsburgh 12. Training dog while carrying a shotgun	10.00
McCutcheon, Daune Merlin, 708 Hilland Ave., Coraopolis. Possessing loaded rifle in vehicle standing along highway	10.00
Miller, Herman Thadeous, 1855 Montour St., Coraopolis. Possessing unloaded shotgun not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M.	25.00
Mooney, Lawrence Aloysius, R. D. No. 3, Coraopolis. Hunting without resident license; Hunting groundhogs in close season; Hunting groundhogs with an auto-loading rifle	40.00
Swift, Thomas Claude, 1400 Strawn Ave., New Kensington. Hunting without resident license and killing male ringneck pheasant in close season	45.00
Szostak, Matthew, 39 Kenmore Ave., Pittsburgh 21. Killing male ringneck pheasant in close season	25.00
Ward, Kelly, 965 Grant St., Monessen. Carrying a rifle while training dogs	10.00
Young, George Edward, 2728 Banksville Rd., Pittsburgh 16. Killing a ringneck pheasant in close season; Killing a ringneck pheasant from an automobile	50.00

ARMSTRONG—\$125

Benigni, Daniel Carl, Box 44, Cadogan. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M.	25.00
Smith, Harry Gene, R. D. No. 4, New Bethlehem. Attempting to kill ringneck pheasant in close season; Attempting to kill same from automobile	50.00
Varhola, Alex Mitchell, Box 153, Cadogan. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M.	25.00
Varner, Ericil Leslie, Worthington. Possessing loaded shotgun in vehicle in motion along highway	25.00

BEAVER—\$100.00

D'Eramo, Ernest, 520 River Avenue, West Aliquippa. Possessing rabbit taken in close season	10.00
Leport, George Dilmer, R. D. No. 1, Industry. Hunting for wild birds without license	20.00
Perriello, Antonio, 107 Edgewood St., Aliquippa. Hunting without a resident license; Possessing a squirrel in close season	30.00
Plutko, Joseph George, R. D. No. 3, Monaca. Training a dog while carrying a shotgun	10.00
Rainaldi, Clement Joseph, Box 63, Racine. Training dogs on game while carrying shotgun	10.00
Rodgers, Thomas Ellis, Mounted Route No. 7, Ellwood City. Training dogs on game while carrying a shotgun	10.00
Totera, Robert Anthony, Box 731, Ellwood City. Training dog while in possession of a shotgun	10.00

BEDFORD—\$220

Kushtoss, Louis, R. D. No. 2, Hopewell. Possessing 12 grey squirrels taken in close season	120.00
Swope, William, R. D., Six Mile Run. Refusing inspection, interfering with State Officer in performance of his duty and resisting arrest	100.00

BERKS—\$375

Apsokardum, Stellos G., R. D. No. 1, Sinking Springs. Possessing parts of 2 female ringneck pheasants in close season	50.00
Hartman, Leonard John, R. D. No. 1, Kempton. Failure to tag trap	10.00
Hertzog, William Clayton, R. D. No. 1, Reading. Hunting waterfowl with unplugged shotgun	10.00
Keller, William Henry, 322 W. Green St., Reading. Hunting without resident license	20.00
LaFollette, Leonard Leo, R. No. 1, Bernville. Molesting trap of another	25.00
Laucks, Jr., Wilson Charles, Box 609, R. D. No. 2, Reading. Training dog on game while carrying shotgun	10.00
Matthew, Clayton William, R. D. No. 2, Fleetwood. Shooting at wild waterfowl, a duck, prior to the opening shooting hours ..	15.00
Mayopoulos, Ray Beach, 717 N. 10th St., Reading. Failure to display license tag while hunting	20.00
Renninger, William Shaffer, R. D. No. 1, Robesonia. Attempting to collect bounty on animal upon which no bounty is authorized ..	25.00
Riggi, Salvatore, 426 W. Greenwich St., Reading. Shooting within 150 yards of an occupied building	25.00
Skoufalos, George, 2135 Fairview St., West Lawn. Possessing five male and one female ringneck pheasant in close season	150.00
Stufflet, Robert Edwin, Blandon. Killing a wild duck after the closing hour for hunting Migratory Waterfowl	15.00

BLAIR—\$140

Dodson, Donald William, 867—17th St., Altoona. Hunting without a resident license	20.00
Houck, Carl M., State Hospital, Hollidaysburg. Hunting without a resident license	20.00
Michaels, Chester J., 318 E. 10th St., Tyrone. Aiding and assisting in killing of two raccoons	50.00
Varner, George Harvey, R. D. No. 1, Tyrone. Aiding and assisting in the killing of two raccoons	50.00

BRADFORD—\$135

Baker, Willis Arvine, R. D. No. 2, Gillett. Hunting wild ducks before opening hour	15.00
Bluhm, Gerald Henry, R. D. No. 6, Towanda. Hunting without securing a resident license; Possession of deer in close season ..	120.00

BUCKS—\$55

Amadio, Carlo, 327 Washington St., Bristol. Hunting game between 4:14 P. M. and 5:45 A. M.	15.00
Amadio, Dominic Vincent, 327 Washington St., Bristol. Hunting game between 4:14 P. M. and 5:45 A. M.	15.00
Spencer, Albert Lee, 7th Ave. & York Rd., R. D. No. 1, Hatboro. Hunting ducks prior to opening hour first day	15.00
White, Jr., Franklin, Chalfont. Hunting ducks with unplugged shotgun	10.00

CAMBRIA—\$145

Biondo, John, Vintondale. Killing a protected bird	10.00
Dyson, George, 1025 Davis St., Nanty Glo. Hunting migratory bird with shotgun containing more than 3 shells	25.00
Henry, Boyd Ager, 313 High St., Ebensburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Kimball, Jack William, 312 E. High St., Ebensburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Roles, Lloyd Lynus, 205 Dishong Road, Johnstown. Hunting game on Sunday; Possessing two grey squirrels in close season	45.00
Ure, Lewis Steve, Vintondale. Hunting ducks after closing hour	15.00

CAMERON—\$325

Griffith, Charles Lester, R. D. No. 1, Emporium. Possessing parts of deer in close season	100.00
Housler, Kenneth Wells, R. D. No. 1, Emporium. Possessing parts of deer taken in close season	100.00
Moat, Jr., Albert Clifford, R. D., Driftwood. Possessing parts of deer taken in close season	100.00
Reid, Donald James, Morris Run. Possessing unloaded rifle not securely wrapped in vehicle, in motion along highway between 5 P. M. and 7 A. M.	25.00

CARBON—\$125

Gray, Hamilton Dean, 232 Fourth St., Weatherly. Fishing from a boat on Brady's Lake after September 30th	25.00
Hendricks, Jacob, 304 Fourth St., Weatherly. Fishing from a boat on Brady's Lake after September 30th	25.00
Leppler, John Hable, 237 Carbon St., Weatherly. Fishing from a boat on Brady's Lake after September 30th	25.00
Miller, George Edward, 139 Carbon St., Weatherly. Fishing from a boat on Brady's Lake after September 30th	25.00
Shiffert, John Henry, 3 Railroad St., Lehighton. Killing ringneck pheasant in close season	25.00

CENTRE—\$745

Bean, Daniel, Gen. Del., Philipsburg. Possessing parts of doe deer taken in close season	100.00
Biddle, Edward, Jr., Bellefonte, R. D. No. 3. Attempting to kill deer in close season	100.00
Biddle, William Lyle, Bellefonte, R. D. No. 3. Attempting to kill deer in close season	100.00

Fourspring, Neal Bruce, Lemont. Hunting without resident license	20.00
Park, John Thomas, Snow Shoe. Attempting to kill deer during close season	100.00
Rossmann, Bruce Irvin, Millheim. Shooting upon lands of public park	25.00
Sester, Joseph John, Snow Shoe. Attempting to kill deer during the close season	100.00
Stover, Wilmer Eugene, Millheim. Killing three wild turkeys in close season; Shooting upon lands of a public park	100.00
Vicard, James Arthur, R. D. No. 1, Philipsburg. Possessing parts of deer taken in close season	100.00

CHESTER—\$255

Burton, Lester Haskell, 120 W. Miner St., West Chester. Killing a protected bird	10.00
Clark, John Alexander, 131 E. Main St., West Chester. Killing wild duck in close season	10.00
DiStefano, Fred Paul, 108 N. Wayne St., West Chester. Killing a protected bird	10.00
Garver, Willard James, Wallace Ave., Downingtown. Possessing a loaded rifle in vehicle standing along highway	10.00
Harple, Granville Lewis, Glenmoore. Using illegal device to take waterfowl	10.00
Hurley, Elmer William, Embreeville. Using illegal device to take waterfowl	10.00
Johnson, Rogers, 400 Glendale Ave., Coatesville. Using an illegal device to take waterfowl	10.00
Malamon, Michael, R. D. No. 2, Coatesville. Possessing more than one wood duck	10.00
McComsey, Leroy Everett, R. D. No. 3, Oxford. Possessing pheasant in close season	25.00
Melton, Charles Alex, 212 No. Franklin St., West Chester. Killing a wild duck in close season	10.00
Mowday, Sanford Bently, 35 S. 4th St., Coatesville. Possessing one wood duck more than daily limit	10.00
Pursel, Grant Esau, 36 Riverside, Pottstown. Hunting squirrel on Sunday	25.00
Reber, Frank Leroy, Glenmoore. Using illegal device to take waterfowl	10.00
Romig, Laverne Harvey, Glenmoore. Using illegal device to take waterfowl	10.00
Thomas, Lacey Jackson, 415 S. Matlack St., West Chester. Killing a wild duck in close season	10.00
Thompson, Jr., Rodman Ellison, Devon. Hunting without resident license	20.00
Ward, Eugene Martin, Embreeville. Using illegal device to take waterfowl	10.00
Ward, Laban Ashton, 10 Brandywine Ave., Downingtown. Using illegal device to take waterfowl	10.00
Warmijak, John, R. D. No. 1, Downingtown. Training dog on game while carrying a shotgun	10.00
Wieneke, Kuhr, R. D. No. 2, Pottstown. Attempting to kill ring-neck pheasant during close season	25.00

CLEARFIELD—\$955

Bowman, Charles Albert, R. D., Mill Hall. Possessing deer taken in close season	100.00
Bowman, Richard Clair, R. D., Mill Hall. Possessing deer taken in close season	100.00
Carter, John Alfred, 210 West 3rd St., Clearfield. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M.	25.00
Edler, Karl William, Grampian. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M.	25.00
Gregg, Kay Ernest, Jr., Burnside. Dumping rubbish on State Game Land	25.00
Gross, George Lawrey, R. D., Karthaus. Possessing deer taken in close season	100.00
Hagn, James Earl, Grampian. Possessing a rabbit in close season; Possessing a loaded rifle in vehicle in motion along highway	35.00
Hagn, Jr., Lewis, Grampian. Possessing rabbit in close season; Possessing loaded rifle in vehicle in motion along highway	35.00
Heikel, Carl Allen, R. D. No. 2, Clearfield. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M.	25.00
Hummel, Jacob Burton, Bigler. Possessing parts of deer taken in close season	100.00
Kouf, Herman Lee, Box 164, North Bend. Trapping without resident license	20.00
Koval, Leonard William, 722 W. Front St., Clearfield. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M.	25.00
Lamey, Lawrence Stephen, R. D. No. 1, Jersey Shore. Killing beaver in close season	50.00
Maines, Bruce Emanuel, Mineral Springs. Possessing unloaded rifle not securely wrapped in vehicle standing along highway between 5 P. M. and 7 A. M.	10.00
Maines, Calvin Grant, Mineral Springs. Possessing unloaded rifle not securely wrapped in vehicle standing along highway between 5 P. M. and 7 A. M.	10.00
Segar, Bert Harvey, Grampian. Possessing a rabbit in close season; Possessing a loaded rifle in vehicle in motion on highway	35.00
Shirery, George Burton, 210 Spruce St., Clearfield. Hunting without resident license	20.00
Smith, James, R. D. No. 2, DuBois. Possessing three grouse in close season; Hunting while hunting rights have been denied	115.00
Taylor, Thomas Lee, R. D. No. 2, Clearfield. Possessing deer taken in close season	100.00

COLUMBIA—\$65

Busch, Wilbert John, R. D. No. 2, Catawissa. Hunting without resident license	20.00
Kocher, Wilbur Don, R. D. No. 2, Benton. Hunting Migratory Game after shooting hours	15.00
Morgan, John William, 1801 N. Market St., Berwick. Hunting ducks after shooting hours	15.00
Ross, Michael, 1220 Sterling Ave., Berwick. Hunting wild ducks after closing hours	15.00

CUMBERLAND—\$80

Caufman, Arthur Eugene, Mt. Holly Springs. Killing a protected bird	10.00
Gutshall, Ralph James, R. D. No. 2, Newville. Hunting game after shooting hours	15.00

Line, L. Lindsay, R. D. No. 6, Carlisle. Hunting game after shooting hours	15.00
Mitchell, Ralph Kenneth, R. D. No. 1, Newburg. Training dog on squirrels while carrying a .22 cal. rifle	20.00
Mitchell, William Mark, R. D. No. 1, Newburg. Possessing one gray squirrel taken in close season	10.00
White, George Richard, R. D. No. 4, Carlisle. Hunting ducks with unplugged shotgun	10.00

DAUPHIN—\$55

Fisher, Jr., William Winters, Box 54, Dauphin. Shooting at waterfowl after one hour before sunset	15.00
Fisher, Sr., William Winters, Box 54, Dauphin. Shooting at waterfowl after one hour before sunset	15.00
Wagner, John Richard, 1278 N. Oyler Road, S. 13th St., Harrisburg. Possessing loaded shotgun in vehicle in motion along highway	25.00

DELAWARE—\$205

Arms, Frank David, R. D. No. 1, Boothwyn. Hunting without resident license; Killing two squirrels in closed season	40.00
Bond, Norman William, 2113 Folston St., Chester. Killing a wild duck in close season	10.00
Bruni, Louis, 2007 Chichester Ave., Linwood. Failure to display license tag while hunting	20.00
Cox, Elmer Martin, 4300 W. 9th St., Chester. Failure to display license tag while hunting	20.00
Kriman, Shahane Taylor, 3620 Rosemont Ave., Upper Darby. Shooting within 150 yards of occupied building	25.00
McIntyre, Walter Joseph, 212 Spring Valley Rd., Lansdowne Park, Darby. Hunting ducks before opening hour first day	15.00
Magness, Joseph Patrick, 219 Lincoln Ave., Collingsdale. Hunting game after closing hour	15.00
Magness, Raymond Flugard, 203 Staley Ave., Collingsdale. Hunting ducks after closing hour	15.00
Smith, Harry Ertis, 146 Long Lane, Upper Darby. Shooting within 150 yards of occupied building	25.00
Thompson, Paul, Ithan. Hunting without resident license	20.00

ELK—\$904

Buhler, John Lee, 100 Grant Road, Ridgway. Attempting to take wild ducks with an illegal device	10.00
Cristini, James, Brockport. Removing sand from State Game Land	25.00
Detsch, James William, R. D. No. 2, St. Marys. Killing doe deer in closed season; Attempting to kill a deer in close season; Concealing a bear illegally killed	400 days
Eckert, Clarence William, R. D. No. 2, St. Marys. Using lights of motor vehicle to take game	50.00
Esordi, Victor, Brockport. Hunting woodcock with shotgun containing more than 3 shells	25.00
Feldbauer, Robert Michael, R. D. No. 2, St. Marys. Possessing three male deer in close season; Killing a doe deer in close season; Attempting to kill deer in close season; Possessing parts of bear in close season	700 days
Grunthaler, Roman Titus, R. D. No. 2, St. Marys. Possessing parts of bear in close season	200.00
Hulings, Elmer G., Box 44, James City. Possessing one raccoon in close season	25.00
Luce, Harold Ray, 1525 Front St., Ridgway. Hunting without resident license	20.00
Malacarne, Ettore, Brandy Camp. Possessing raccoon pelt in close season; Possessing deer taken in closed season	125.00
Marche, Louis Edward, Brandy Camp. Killing deer taken in close season	99.00—1 day
Marche, Theodore, Brandy Camp. Possessing deer taken in close season	100.00
Mazzaferro, Camillo Lawrence, 221 Madison St., St. Marys. Using lights of a motor vehicle to take game	50.00
Peters, Howard, Brockport. Removing sand from State Game Land	25.00
Stauffer, Hilary Edward, 185 Neubert St., St. Marys. Hunting on Special Dog Training Area	25.00
Wisor, Roy, Brockport. Removing sand from State Game Lands	25.00
Woodward, Arthur William, R. D. No. 2, Kane. Killing a deer in close season	100.00

FAYETTE—\$210

Bezjak, John, Box 24, Grays Landing. Failure to display license tag while hunting	20.00
Combs, Joseph Harvey, 31 Mill St., Uniontown. Failure to display a license tag; Attempting to kill a squirrel during close season	30.00
Dunay, Martin Joseph, 27 W. Coffee St., Uniontown. Hunting without resident license. Hunting a squirrel in close season	30.00
Fisher, Wilbur Ray, Markleysburg. Hunting without resident license	20.00
Jenkins, Albert Ross, Markleysburg. Attempting to take squirrel on two separate dates in close season	20.00
Kollar, Bernard Charles, Box 2-B, R. D. No. 4, Uniontown. Hunting rabbits in closed season	10.00
Koskanic, George Andrew, R. D. No. 2, Smithfield. Failure to display license tag while hunting	20.00
Lettanzi, Attilio, Grays Landing. Failure to display a license tag while hunting	20.00
Newman, Arthur Charles, R. D. No. 1, Upper Middletown. Hunting without resident license	20.00
Renner, Joseph Robert, 186 Downer Ave., Uniontown. Hunting rabbits in close season	10.00
Sexton, Arthur Junior, R. D. No. 1, Smithfield. Training dogs while carrying shotgun	10.00

FRANKLIN—\$300

Armstrong, Edward Daniel, Hotel LaMar, Chambersburg. Hunting game on Sunday	25.00
Baker, Kenneth, Rt. No. 1, Fayetteville. Hunting wild ducks in safety zone	25.00
Baker, Luther, Rt. No. 1, Fayetteville. Hunting wild ducks in safety zone	25.00
Frey, Howard Glen, Marion. Possessing one wood duck over daily limit	10.00
Hill, Ronald R., Rt. No. 1, Orrtanna. Possessing loaded shotgun in vehicle in motion upon a public highway	25.00
Kauffman, Irvin Edward, R. D. No. 4, Waynesboro. Transporting deer unlawfully taken	100.00

Kline, William Varden, Rt. No. 6, Chambersburg. Hunting wild ducks in close season 10.00
 Pine, Max Eugene, Rt. No. 1, St. Thomas. Possessing rifle shells in vehicle in motion upon a public highway between 5 P. M. and 7 A. M., not securely wrapped 25.00
 Staley, Julian John, Rt. No. 2, Fayetteville. Hunting wild ducks in safety zone 25.00
 Timmons, Daniel Lehman, Rt. No. 1, Greencastle. Hunting wild ducks in close season 10.00
 Weller, Clarence Lee, Rt. No. 6, Chambersburg. Carrying a .22 rifle while training dog 10.00
 Widder, Vernon Clifford, Rt. No. 6, Chambersburg. Hunting wild ducks in closed season 10.00

GREENE—\$65

Fox, Robert Glen, Mt. Morris. Possessing two grey squirrels in closed season 20.00
 Fox, Walter, R. D. No. 1, Mt. Morris. Intent to defraud a false declaration of date to collect bounty 10.00
 Redman, James, R. D. No. 1, Waynesburg. Hunting game on Sunday 25.00
 Yoney, Domenick, R. D. No. 2, Mt. Morris. Training dogs on game while carrying a shotgun 10.00

HUNTINGDON—\$160

Cowan, James Milford, RD, Robertsdale. Possessing shotgun in vehicle in motion on highway between 5 P. M. & 7 A. M. 25.00
 Claycomb, Roy James, Gen. Del., Mt. Union. Possessing 5 grey squirrels in closed season 50.00
 Garland, Duane Hudson, Aitch. Possessing 4 grey squirrels in closed season 40.00
 Long, Harry Wilson, R. D. No. 1, Heston. Possessing 1 live raccoon in closed season without permit 25.00
 Roher, Harry, RD, Three Springs. Possessing parts of cottontail rabbit in closed season 10.00
 Stahlman, Harry William, RD, Three Springs. Killing cottontail rabbit in closed season 10.00

INDIANA—\$115

Busija, Nick Steve Jr., McIntyre. Possessing male ringneck pheasant taken in closed season 25.00
 Caylor, Bernard, Parnell, R. D. No. 1, Creekside. Possessing male ringneck pheasant taken in closed season; hunting without resident license 45.00
 Miller, Bryan, R. D. No. 1, Creekside. Assisting to conceal pheasant unlawfully killed 25.00
 Silveri, Walter, Box 317, Homer City. Possessing rabbit in closed season 10.00
 Vargo, Edward, R. D. No. 2, Homer City. Possessing rabbit in closed season 10.00

JEFFERSON—\$253

Burkett, Lorraine, William, Coolspring. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. & 7 A. M. 25.00
 Dickey, Clarence Dale, 46 Richards St., Brookville. Possessing one rabbit taken in closed season 10.00
 Dusch, Thomas Vernon, Box 682, Falls Creek. Killing wood duck in closed season 10.00
 Grape, John Omar, Stump Creek. Possessing loaded rifle in vehicle in motion on highway; possessing two rabbits in closed season 45.00
 Johnson, William Ardell, R. D. No. 2, Brockway. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. & 7 A. M. 8.00—17 days
 Kaizer, LeRoy Edward, Stump Creek. Possessing two rabbits in closed season 20.00
 Lingenfelter, Robert Eugene, Coolspring. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. & 7 A. M. 25.00
 Plyler, Arnold Gennes, Knoxdale. Killing one rabbit in closed season 10.00
 Siemucha, Edward, Stump Creek. Possessing 2 rabbits in closed season 20.00
 Siverling, Guy Robert, R. D. No. 5, Punxsutawney. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. & 7 A. M. 25.00
 Starr, George Warren, R. D. No. 2, Brockway. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 8:30 P. M. & 5 A. M. 25.00
 Torretti, Quinto Louis, Stump Creek. Possessing loaded rifle in vehicle in motion on highway; possessing two rabbits in closed season 45.00
 Wolfe, William Elsworth, Knoxdale. Assisting to conceal rabbit unlawfully taken 10.00

JUNIATA—\$450

Deihl, Walter Harry, RD, Port Royal. Possessing parts of deer taken during the closed season 100.00
 Lyter, Holmes Harry, East Waterford. Possessing parts of deer taken during the closed season 100.00
 Page, Leroy Ellsworth, R. D. No. 1, Port Royal. Possessing deer more than 60 days after close of season 50.00
 Peterson, Glen Robert, RD, Port Royal. Possessing parts of deer taken during the closed season 100.00
 Sheets, David Loyd, R. D. No. 1, Port Royal. Possessing parts of deer taken in closed season 100.00

LACKAWANNA—\$285

Galli, Guerino, 318 Dunlap St., Peckville. Hunting game between 5 P. M. & 7 A. M. 15.00
 Garofoli, Angelo, 307 Grassy Ave., Jessup. Hunting game between 5 P. M. & 7 A. M. 15.00
 Garofoli, Armond Joseph, 130 R. Powell Ave., Jessup. Hunting game between 5 P. M. & 7 A. M. 15.00
 Possanza, Frank, 907 Ward St., Jessup. Hunting game between 5 P. M. & 7 A. M. 15.00
 Reynolds, Edwin Warren, Moscow. Possessing parts of deer during closed season; possessing loaded rifle in vehicle in motion on highway; killing deer during closed season 225.00

LANCASTER—\$95

Abel (3rd) Harvey Dombach, 523 Union St., Columbia. Possessing snow goose in closed season 10.00

Arata (3rd) Paul Francis, 529 Lancaster Ave., Lancaster. Shooting within 150 yds. of occupied building 25.00
 Hollingsworth, Jessel Royce, 216 S. 3rd St., Columbia. Killing a snow goose in closed season 10.00
 Pickle, Charles Earnest, R. D. No. 7, Lancaster. Removing hazel nuts from State Game Lands 25.00
 Smith Jr., Elmer David, 501 W. Chestnut St., Lancaster. Shooting within 150 yds. of occupied building 25.00

LEBANON—\$67.50

Deitzler, William James, R. D. No. 1, Jonestown. Failure to display license tag while hunting; assisting to kill one cottontail rabbit 30.00
 Mader Jr., George David, 1035 Colebrook Rd., Lebanon. Possessing unloaded rifle not securely wrapped in vehicle standing on highway between 5 P. M. & 7 A. M. 10.00
 Templin, George Robert, 24 & Beaumont Sts., Lebanon. Hunting waterfowl prior to opening hour first day 15.00
 Warlow, Richard Lorraine, 611 N. 9th St., Lebanon. Possessing unloaded rifle not securely wrapped in vehicle standing on highway between 5 P. M. and 7 A. M. 10.00

LEHIGH—\$160

Bucha, John George, 532 Brick St., Allentown. Hunting ducks after closing hour 15.00
 Bucha, Frank Paul, 532 Brick St., Allentown. Hunting ducks after closing hours 15.00
 Dech, Calvin Raymond, Route No. 1, Allentown. Killing ringneck pheasant cock in closed season 25.00
 Krause, Keith LaVerne, 242 E. Mosser St., Allentown. Hunting without resident license 20.00
 Mosser, Charles Henry, R. No. 1, New Tripoli. Killing grouse and rabbit in closed season; hunting grouse and rabbit on Sunday 60.00
 Shellhammer, Earl Richard, R. No. 2, Allentown. Hunting ducks after closing hour—4:45 P. M. 15.00
 Whitney, John Joseph, 678 Ostrum St., Fountain Hill. Trapping rabbit in closed season 10.00

LUZERNE—\$420

Baran, Edward Conrad, Stockton. Hunting without first securing resident license 20.00
 Bernosky, Albert Thomas, 21 George St., Pittston. Possessing cottontail rabbit taken in closed season; possessing raccoon taken in closed season 35.00
 Boone, John Engle, R. D. No. 1, Hunlock Creek. Training dog on raccoon after midnight 10.00
 Casaia, Frederick, R. D. No. 1, East End Blvd., Wilkes-Barre. Possessing game unlawfully taken 10.00
 Crossen, Frank Eugene, R. D. No. 2, Hunlock Creek. Training dog on raccoon after midnight 10.00
 Demas, Peter, 444 Hazel St., Wilkes-Barre. Hunting wild ducks with unplugged, repeating shotgun 10.00
 Forte, Nunzio, 924 4th St., W. Pittston. Hunting without resident license 20.00
 Gawelko, Thaddeus Francis, 31 Chilvick St., Wilkes-Barre. Fishing on Brady's Lake after September 30 25.00
 Giovannini, Joseph Peter, 223 Sanovia St., Exeter. Hunting wild ducks with unplugged, repeating shotgun 10.00
 Heston, Joseph William, 65 Swallow St., Pittston. Killing one protected bird 10.00
 Juditz, Michael A. S., Jr., 357 Charles St., Luzerne. Killing rabbit in closed season 10.00
 King, Richard Ellsworth, R. D. No. 2, Dallas. Training dog on raccoon after midnight 10.00
 Kreidler, Eugene, R. D. No. 1, Dallas. Training dog on raccoon after midnight 10.00
 Latona, Leo Joseph, 109 Tompkins St., Pittston. Hunting migratory game with unplugged gun and possessing one wood duck over the daily limit 20.00
 Mace, Charles Wilson, 445 Winters Ave., West Hazleton. Hunting wild ducks with an unplugged repeating shotgun 10.00
 Manussky, Frank Paul, 158 Boland Ave., Wilkes-Barre. Possessing one wood duck over the daily limit 10.00
 Marranca, Sam, 31 Market St., Pittston. Hunting game prior to opening hour 15.00
 McClee, Daniel Ivan, 58 Columbus Ave., Wilkes-Barre. Fishing on Brady's Lake after September 30 25.00
 Melski, Michael, 558 Orchard St., Warrior Run. Hunting ducks after the legal closing hour 15.00
 Ozmina, John, 514 Front St., Warrior Run. Hunting ducks after legal closing hour 15.00
 Palermo, Louis Charles, 107 Maple St., W. Pittston. Failure to display hunting license while hunting 20.00
 Pisaneschi, Armando B., 2 Rowlands Lane West Wyoming. Hunting wild ducks with an unplugged repeating shotgun 10.00
 Saito, Louis John, 237 S. Main, Pittston. Hunting game prior to opening hour first day 15.00
 Sipple, Loren Russell, 9 Constine Court, Wilkes-Barre. Possessing cartridge larger than .22 long not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M. 25.00
 Steltz, Robert Eugene, R. D. No. 1, Hunlock Creek. Training dog on raccoon after midnight 10.00
 Verbinski, Walter Stanley, R. D. No. 2, Shickshinny. Hunting wild ducks with an unplugged repeating shotgun 10.00
 Vinciarelli, Guisepppe, R. D. No. 2, Wilkes-Barre. Hunting wild ducks with a shotgun containing more than 3 shells 10.00
 Zutansky, Stanley, 131 Jackson St., McAdoo. Training dogs on Sunday without consent of landowner 10.00

LYCOMING—\$675

Clark, Trevanian Raymond, 708 W. Third St., Williamsport. Training dog on game while carrying .22 cal. rifle 10.00
 Dowling, Carl Ellsworth, 625 Poplar St., Williamsport. Possessing deer in closed season 100.00
 Dowling, Norman Edward, 625 Poplar St., Williamsport. Killing a deer in closed season; transporting deer unlawfully taken 150.00
 Fulkrod, Richard Paul, R. D. No. 1, Linden. Hunting game prior to opening hour of first day 15.00
 Gordner, Bert, R. D. No. 1, Unityville. Attempting to kill deer in closed season; possessing a deer in closed season 200.00
 Gordner, Gilbert Edgar, R. D. No. 1, Unityville. Hunting game between 5 P. M. and 7 A. M. 15.00
 Gordner, Raymond Edward, R. D. No. 3, Williamsport. Attempting to kill deer in closed season 100.00

Hallett, Franklin Clarence, 318 E. Ross St., Williamsport. Hunting duck prior to opening hour of first day 15.00
 McLaughlin, Kenneth Keith, Ralston (PO). Removing property from State Game Land 25.00
 Menne, Ernest Guy, 1861 E. Third St., Williamsport. Failure to display license tag while hunting 20.00
 Shipman, Robert Taylor, R. D. No. 4, Muncy. Possessing a ring-neck pheasant in closed season 25.00

McKEAN—\$40

Benteen, Norman L., R. D. No. 1, Corydon. Hunting without resident license 20.00
 Peters, William Edward, R. D. No. 1, Port Allegany. Hunting without resident license 20.00

MIFFLIN—\$280

Furgeson, Ellsworth Charles, Milroy. Training dogs on raccoon after midnight 10.00
 Miller, William Abraham, Newton Hamilton. Hunting without resident license 20.00
 Nowark, Jr., Frederick William, 618 W. 4th St., Lewistown. Possessing parts of deer taken in closed season, possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M. 125.00
 Thornburg, Emery Arthur, 821 N. 4th St., Lewistown. Possessing parts of deer taken in closed season; possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M. 125.00

MONROE—\$35

Knowles, Earl, R. D. No. 3, Stroudsburg. Possessing live raccoon without permit 25.00
 Storms, Carl Richard, 612 Phillip St., Stroudsburg. Hunting wild ducks with shotgun containing more than 3 shells 10.00

MONTGOMERY—\$190

DeSantio, Anthony, Broadway and Sycamore Ave., Willow Grove. Possessing rifle loaded in vehicle standing on highway 10.00
 Kozak Jr., John, Box 47, East Greenville. Attempting to take ringneck pheasant in closed season 25.00
 Loux, Enos Allen, 155 Avenue A, Horsham. Hunting crows without resident license 20.00
 Loux, Robert Lynn, 155 Avenue A, Horsham. Possessing squirrel in closed season; hunting without resident license 30.00
 Milowychok, Theodore Joseph, 533 Astor St., Norristown. Possessing male ringneck pheasant in closed season 25.00
 Pursel, David Ray, R. D. No. 3, Pottstown. Hunting game on Sunday 25.00
 Pursel, Grant Esau, 36 Riverside, Pottstown. Shooting at game in closed season 10.00
 Schlagel, LeRoy Chester, 409 W. 11th St., Conshohocken. Using illegal device to take waterfowl 10.00
 Trappe, John Lewis, 14 W. Chestnut St., Souderton. Killing a protected bird 10.00
 Werner, Harry Ellsworth, 120 Linden Ave., Hatboro. Hunting ducks prior to opening hour first day 15.00
 Wolfe, Jr., Rudolph Joseph, 891 South St., Pottstown. Hunting wild ducks with an illegal device 10.00

MONTOUR—\$210

Albeck, Kline Edward, R. D. No. 3, Danville. Possessing parts of male deer taken in closed season 100.00
 Gardner, Charles Samuel, R. D. No. 3, Danville. Did possess parts of deer taken in closed season 100.00
 Hartman, Charles Philip, 311 Grand St., Danville. Using unplugged gun in hunting migratory waterfowl 10.00

NORTHAMPTON—\$125

Christman, John Calvin, 943 George St., Pen Argyl. Shooting protected bird 10.00
 Daubert, Jr., Clarence John, R. D. No. 1, Mt. Bethel. Failure to display license while hunting 20.00
 Oswald, Stephen Michael, 1090 Wilkes-Barre St., Easton. Possessing two raccoon skins taken in closed season 50.00
 Shannon, Jr., Edward Thomas, R. D. No. 1, Mt. Bethel. Failure to display license tag while hunting 20.00
 Terplan, Joseph George, 1039 E. Mechanic St., Bethlehem. Attempting to kill ringneck hen in closed season 25.00

NORTHUMBERLAND—\$190

Bailey, Raymond Albert, R. D. No. 1, Sunbury. Hunting wild waterfowl contrary to rules and regulations governing hunting hours 15.00
 Cooney, Nelson Bernard, 1351 Chestnut St., Kulpmont. Using unplugged gun in hunting migratory waterfowl 10.00
 Downs, William Junior, 525 N. 5th St., Sunbury. Hunting ducks and waterfowl with unplugged repeating shotgun 10.00
 Flinn, James Bogar, Dalmatia. Hunting wild ducks after closing hour 15.00
 Frey, Manford Earnest, 204 Pine St., Sunbury. Hunting wild waterfowl after closing hour 15.00
 Heintzelman, John William, R. D. No. 1, Box 99, Shamokin. Hunting wild ducks after closing hour 15.00
 Krieger, Robert Henry, 123 Pine St., Sunbury. Hunting wild ducks after closing hour 15.00
 Lenker, Albert Cornelius, R. D., Dalmatia. Hunting ringneck pheasant on Sunday; shooting at male ringneck pheasant in closed season 50.00
 Mattern, Malcolm Stine, 1144 Market St., Sunbury. Hunting ducks and geese after shooting hours 15.00
 Smith, Homer Samuel, R. D. No. 1, Dornsife. Hunting wild ducks after closing hours 15.00
 Snyder, Robert Francis, 117 N. 8th St., Sunbury. Hunting wild ducks after closing hours 15.00

PHILADELPHIA—\$490

Brown, Christopher, 408 Titan Ave., Phila. 47. Carrying shotgun while training dog 10.00
 Burgess, Leo Andrew, 6649 Large St., Phila. 24. Possessing loaded rifle in vehicle while standing on public highway 10.00
 Cleeland Jr., John Henry, 447 E. Mt. Pleasant Ave., Phila. Shooting within 150 yds. of occupied building 25.00
 Cochran, Francis David, 3205 St. Vincent St., Phila. 24. Possessing loaded rifle in vehicle while standing along highway 10.00

Cook, David, 7617 Dicks Ave., Phila. Hunting ducks after closing hour 15.00
 Crase, Nicholas Peter, 2812 S. Alder St., Phila. 48. Shooting at and attempting to kill a ringneck pheasant in closed season 25.00
 Debnam, William, 1322 N. 22nd St., Phila. Possessing loaded shotgun in vehicle while in motion 25.00
 Fink, Howard Victor, 6243 Castor Ave., Phila. 24. Possessing loaded rifle in vehicle while on public highway 10.00
 Golphln, Oner Lee, 1330 N. 12th St., Phila. Possessing parts of deer in closed season 100.00
 Guariglia, Peter Samuel, 5843 Fernwood St., Phila. Hunting ducks before opening hour first day 15.00
 Harris, John Christman, 2536 Jasper St., Phila. Shooting at and attempting to kill a ringneck pheasant in closed season 25.00
 Hoffman, Paul Harold, 1502 W. Erle Ave., Phila. Possessing more than one wood duck 10.00
 Jolly Jr., Daniel Crawford, 2660 Sylman St., Phila. Hunting game after closing hour 15.00
 Loudon, James Everett, 6141 Woodstock St., Phila. Hunting wild ducks in closed season 10.00
 Loudon, William James, 6141 Woodstock St., Phila. Hunting wild ducks in closed season 10.00
 McClinton, John McConnell, 6141 Woodstock St., Phila. Hunting wild ducks in closed season 10.00
 MacDonald, Thomas Milton, 81 and Ave. B, Phila. Hunting ducks after closing hour 15.00
 McFate, Herbert William, 2541 S. 71st St., Phila. Hunting ducks after closing hour 15.00
 Murphy, Edward James, 1305 Stirling St., Phila. 11. Possessing loaded rifle in vehicle while standing along highway 10.00
 Nevins, Henry, 1214 Mt. Vernon St., Phila. 23. Killing ringneck pheasant hen in closed season; hunting ringnecks on Sunday .. 50.00
 Orenshaw Sr., Robert Lee, 6401 Upland St., Phila. Hunting ducks after closing hour 15.00
 Peace, Jerome, 3737 Haverford Ave., Phila. Hunting ducks after closing hour 15.00
 Pollick, Alexander Charles, 8131 Bulst Ave., Phila. Hunting game after closing hour 15.00
 Schick, Adolph D., 2848 S. 16th St., Phila. Possessing loaded rifle in vehicle in motion on public highway 25.00
 Williams, Benjamin Noel, 3421 N. Reese St., Phila. Using an illegal device to hunt ducks 10.00

POTTER—\$155

Crawford, Lyman John, Shinglehouse. Hunting without resident hunters license 20.00
 Earle, Glenn Edward, Austin. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P. M. and 7 A. M. 25.00
 Rubar, Gerald Frederick, R. D. No. 2, Coudersport. Possessing parts of deer taken in closed season 100.00
 Van Curen, Charles Mert, Austin. Attempting to kill a protected bird 10.00

SCHUYLKILL—\$275

Brown, Paul Clark, 333 Washington St., Frackville. Using unplugged gun in hunting migratory waterfowl 10.00
 Ebert, John Nathaniel, 537 Parkway, Schuylkill Haven. Assisting in attempting to kill a rabbit in closed season 10.00
 Evans, Thomas LeRoy, 226 Thwing St., St. Clair. Hunting waterfowl after closing hour 15.00
 Homewood, Russel Benjamin, Auburn. Possessing loaded shotgun in vehicle in motion on highway 25.00
 Kunkel, Norman O. H., R. D. No. 2, New Ringgold. Possessing woodchuck taken in closed season 10.00
 Leonard, James Robert, Box 123, Cressona. Possessing a protected bird 10.00
 Maurer, Curtis Robert, Main St., Mowry. Hunting ducks with magazine shotgun not plugged 10.00
 Molk, John Paul, Tower City. Hunting game on Sunday; shooting at male ringneck pheasant in closed season 50.00
 Motto, Martin Stephen, 512 S. Mill St., St. Clair. Hunting waterfowl after closing hour 15.00
 Quin, Robert Frederick, 1627 W. Market St., Pottsville. Training dog on small game while carrying shotgun 10.00
 Shirey, William Michael, Sr., R. D. No. 1, Auburn. Killing two rabbits in closed season, killing two rabbits from an automobile; hunting without resident license; possessing loaded shotgun in vehicle in motion on highway 85.00
 Sweigert, Kenneth Wm, Landingville. Killing red squirrel in closed season 10.00
 Zegley, Albert Francis, 913 E. Mahanoy St., Mahanoy City. Hunting waterfowl after closing hour 15.00

SUSQUEHANNA—\$225

Gilvary, William Robert, R. D., Carbondale. Possessing 3 pheasants taken in closed season 75.00
 Kulikowski, Sebastian L., 420 Hudson St., Forest City. Possessing 1 wood duck over limit 10.00
 Lynch, Stephen George, Clifford. Shooting at ducks after lawful closing hour 15.00
 Oakley, William Dennis, Thompson. Killing deer not having 2 points to an antler 100.00
 Pooler, James Daniel, R. D. No. 3, Susquehanna. Attempting to defraud the Commonwealth through the collection of bounty .. 25.00

SNYDER—\$35

Keller, John Henry, Port Trevorton. Hunting ducks and geese after shooting hours 15.00
 Lamon, Arthur Allen, 216 N. Market St., Selinsgrove. Possessing one wood duck over first day limit 10.00
 Roush, Harold Eugene, R. D. No. 2, Middleburg. Possessing one wood duck over first day limit 10.00

SOMERSET—\$235

Herring, Robert Franklin, Sallsbury. Hunting migratory waterfowl with shotgun capable of holding more than 3 shells 25.00
 Nicklow, Robert Solomon, Acost. Hunting migratory bird, a dove, with repeating shotgun not properly plugged 10.00
 Sarver, Elwood Merle, R. D. No. 4, Berlin. Possessing parts of deer in closed season 100.00
 Shilling, Melvin Harry, R. D. No. 4, Berlin. Possessing parts of deer in closed season 100.00

SULLIVAN—\$40

Guyliemi, John William, Mildred. Hunting migratory game with an unplugged gun	25.00
Sheleman, Joseph, Main St., Lopez. Hunting migratory game after shooting hours	15.00

TIOGA—\$970

Beard, Clyde, Ernest, R. D., Knoxville. Killing a deer in closed season	100.00
Carew, Fred, Morris Run. Possessing parts of two deer taken in closed season	200.00
Doan, Reed Wendell, R.D., Knoxville. Assisting in killing deer in closed season	100.00
English, George William, R-7, Wellsboro. Possessing deer in closed season	100.00
Garrison, Vernon Halsey, R. D. No. 2, Millerton. Hunting wild ducks with unplugged repeater shotgun; possessing two wild ducks in closed season; hunting wild ducks before opening hour	45.00
Goodwin, Burdette Ely, R. D. No. 2, Wellsboro. Hunting ducks without a plug in shotgun	10.00
Gorda, Paul, R. D. No. 3, Wellsboro. Hunting without resident license	20.00
Howe, Russell Edmond, R. D. No. 1, Mainsburg. Possessing a deer taken in closed season	100.00
Johnson, Ralph Elwood, Box 164, Tioga. Possessing a raccoon taken in closed season	25.00
Jones, Thurston LaRue, R-3, Wellsboro. Attempting to kill a ringneck pheasant in closed season	25.00
Purvis, Fay Omer, R. D. No. 1, Tioga. Dog chasing deer	25.00
Sechrist, Bruce Edward, R. 5, Wellsboro. Possessing parts of deer in closed season	100.00
Townsend, Arthur Luther, Covington. Hunting without resident license	20.00
Witherspoon, Clashous, R-7, Wellsboro. Possessing parts of deer in close season	100.00

UNION—\$360.00

Deitrick, George Homer, R. D. No. 1, New Columbia. Possessing parts of two deer taken in closed season	200.00
Galloway, Warren Miller, 1225 Market St., Lewisburg. Hunting ducks after shooting hours	15.00
Guyerm, Lee Bixler, Vicksburg. Possessing a loaded rifle in vehicle standing along highway	10.00
Oberdorff, Kenneth Dale, R. D. No. 2, Mifflinburg. Failure to stop motor vehicle upon signal of Game Protector	10.00
Ross, Raymond Albert, R. D. No. 2, Mifflinburg. Possessing a grouse taken in closed season	25.00
Walters, Jack Eyer, R. D. No. 1, New Columbia. Possessing parts of deer taken in closed season	100.00

WASHINGTON—\$140.00

Brown, George William, R. D. No. 2, Avella. Training dog on game while carrying shotgun	10.00
Butler, Joseph Daniel, Box 17, Westland. Training a raccoon dog on game after midnight	10.00
Chmel, Vinsent Sr., 11 Ridge Ave., Washington. Attempting to kill rabbit in close season	10.00
Fauvie, Albert Joe, R. D. No. 1, Coal Center. Making false declaration of date when fox was killed	10.00
Hall, Jesse Melvin, R. D. No. 4, McDonald. Training a dog on game while carrying a shotgun	10.00
Hamilton, Mark Lee, Eldersville. Training dogs on game while carrying gun	10.00
Hazen, Robert Lee, R. D. No. 5, Washington. Killing a protected bird	10.00
Julian, Anthony, 42 West Spruce St., Washington. Possessing two ringneck pheasants in captivity	50.00
Romanoff, Erwin, 88 S. Main St., Washington. Issuing hunters license without satisfactory identification	20.00

WAYNE—\$450.00

Keim, Martin Joseph, 215 Grandview Ave., Hawley. Transporting one male deer killed in close season; Killing one male deer in close season	200.00
Lockwood, Gary Allen, Lookout. Killing a deer in closed season	100.00
Lovelace, Fred Wm., Box 63, Hawley. Possessing parts of deer during close season	100.00
Poltania, Louis, R. D. No. 1, Waymart. Possessing one wood duck over possession limit; Hunting ducks between 5 P.M. & 7 A.M.	25.00
Skates, John, R. D. No. 1, Waymart. Possessing one wood duck over possession limit; Hunting ducks between 5 P.M. & 7 A.M.	25.00

WESTMORELAND—\$230.00

Bitner, Thomas Edwin, Box 30, Rector. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway between 5 P.M. & 7 A.M.	25.00
Cresconzi, John, Cora St., Jeannette. Killing protected bird	10.00
Hill, Alexander Urquhart, 521 Locust St., Turtle Creek. Destroying beaver dam without special permit	50.00
Logan, James Jones, Jones Mills. Hunter injuring livestock ...	25.00
Marsh, John Samuel, Box 4, Torrance. Killing one rabbit in close season; Possessing unloaded shotgun not securely wrapped in vehicle in motion on highway between 5 P.M. & 7 A.M.	35.00
Patterson, Samuel James, Box 114, Trafford. Attempting to kill squirrel in close season	10.00
Peterson, Richard Lewis, Torrance. Assisted in the killing of two rabbits in close season	20.00
Ross, Maurice Henry, R. D. No. 2, Latrobe. Possessing loaded rifle in vehicle in motion on highway	25.00

Shields, Martin Ralph, Box 114, Trafford. Attempting to kill squirrel in close season	10.00
Tomco, Robert Michael, R. D. No. 3, Irwin. Hunting rabbits in close season	10.00
Tomco, William Anthony, R. D. No. 3, Irwin. Possessing one rabbit in close season	10.00

WYOMING—\$110.00

Lewis, Earl Raymond, R. D. No. 2, Mehoopany. Possessing parts of rabbit taken in close season; Possessing parts of deer taken in close season	110.00
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YORK—\$115.00

Brehm, Marvin Henry, R. D. No. 1, Dillsburg. Hunting waterfowl after hunting hours	15.00
Gordon, Jr., John William, R. D. No. 1, Red Lion. Hunting without resident license	20.00
Gross, Larry Bernard, Rt. No. 5, Hanover. Killing wood duck in close season	10.00
Richardson, Woodrow Franklin, 914 W. College Ave., York. Hunting ducks after closing hour	15.00
Rishel, James Smith, R. D. No. 1, Thomasville. Killing male ringneck pheasant in close season	25.00
Strausbaugh, Edgar Thoman, R. D. No. 4, York. Hunting ducks after closing hour	15.00
Sweitzer, Elwood Edison, 23 S. Newberry St., York. Hunting ducks after closing hour	15.00

NON-RESIDENT—\$2,180.00

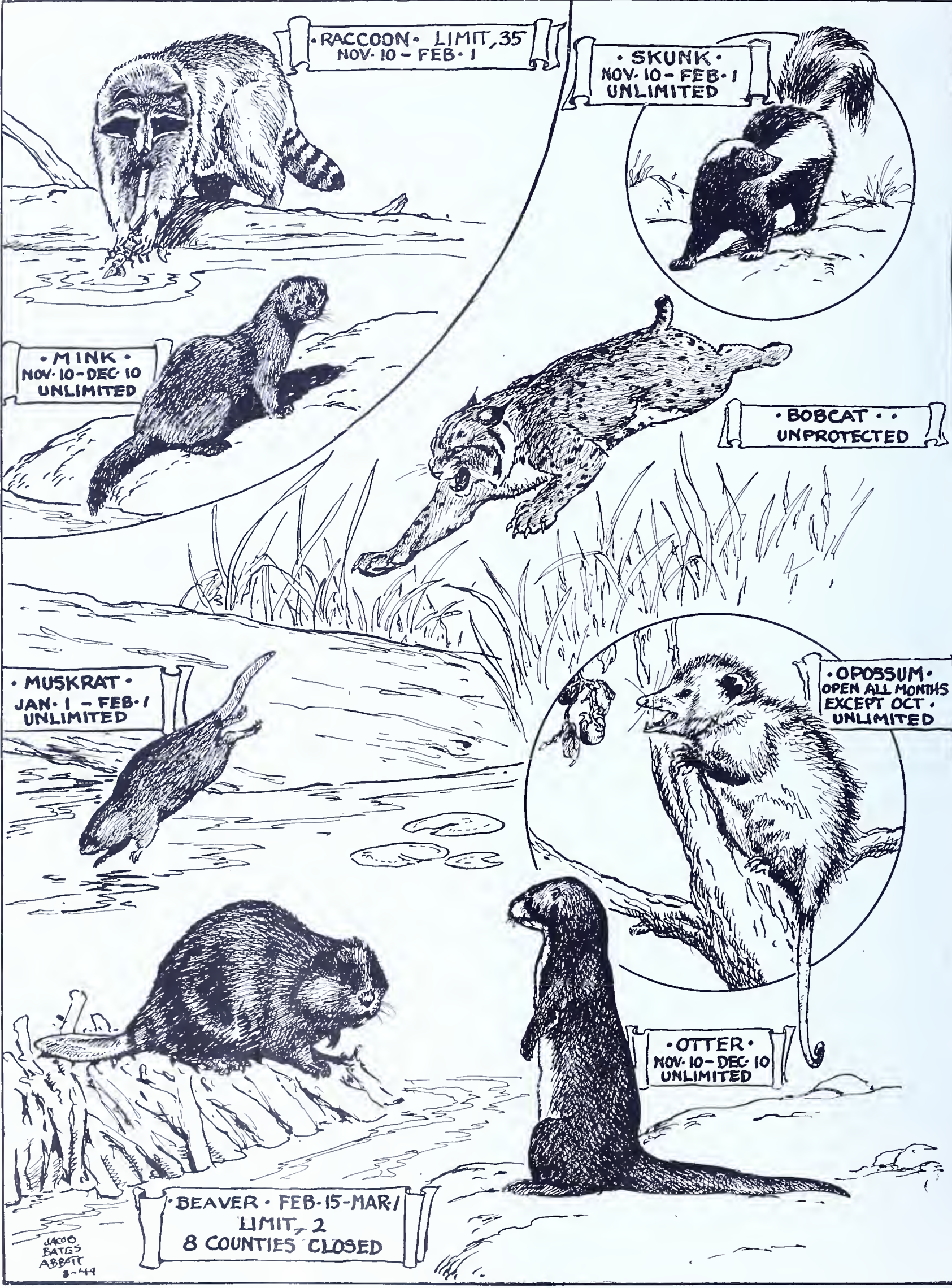
Bankhead, Carr, Box 175, Jere, W. Virginia. Hunting without a non-resident license	50.00
Bernoski, Walter Peter, 428 Posten Ave., Morgantown, W. Virginia. Killing grey squirrel in close season; Hunting without non-resident license	60.00
Brozka, Carl Howell, 1502 Grand Ave., Wellsburg, W. Virginia. Hunting without non-resident license	50.00
Burns, Albert, Box 1234, Laurel Point, W. Virginia. Hunting without a non-resident license; Killing a grey squirrel in close season	60.00
Butler, William Paul, Park View Land, Wheeling, W. Virginia. Hunting without non-resident license	50.00
Carey, Philip Earl, 1620 Broadway St., Cincinnati, Ohio. Possessing parts of deer taken in close season	100.00
Daview, Donald Charles, Box 6, Cassville, W. Va. Hunting without non-resident license; Killing grey squirrel in close season	60.00
Derry, James Franklin, 351 Belmont St., Detroit 2, Mich. Hunting without non-resident license; Loaded rifle in vehicle standing along highway	60.00
Fisher, Carrol Jerome, 1155 Alakea St., Honolulu, Hawaii. Possessing one grey squirrel in close season	10.00
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Murray, Billy Joe, Cado, Oklahoma. Hunting without a non-resident license; Attempting to kill deer in close season	150.00
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Pim, William Curtis, 3606 Leona Ave., Shadyside, Ohio. Hunting without non-resident license; Killing 2 squirrels in close season	70.00
Robertson, Richard Allen, 411 Madison St., Martins Ferry, Ohio. Hunting without non-resident license	50.00
Shelton, William Richard, Rt. No. 2, Fairmont, W. Va. Hunting without non-resident license	50.00
Short, Lisle, Gasport, N. Y. Hunting without non-resident license; Attempting to kill deer in close season with an artificial light	150.00
Simmons, Richard Gilbert, R. D. No. 8, Box 637, Cincinnati, Ohio. Possessing parts of deer taken in close season	100.00
Spevock, Nick, R. D. No. 5, Fairmont, W. Virginia. Hunting without non-resident license	50.00
Stanfield, Arthur John, Thorne St., Horseheads, N. Y. Hunting without securing a non-resident hunting license; Possessing illegally killed deer	150.00
Staubs, Marshall William, Charlestown, West Virginia. Non-resident hunting in Penna., without a license; Killing one grey squirrel in close season	60.00
Valaer, John Peter, 129 N St., Buffalo, N. Y. Giving false information to obtain a resident hunting license	20.00
VanGolder, Rodney Frank, R. D. No. 1, Odessa, N. Y. Using a vehicle to transport an illegally killed deer; Possessing an illegally killed deer; Attempting to kill deer in closed season	300.00
Wiles, Carl Everett, Osage, W. Virginia. Hunting without non-resident license	50.00
Williams, Joseph Gerald, Box 154, Cassville, W. Va. Hunting without non-resident license	50.00
Womer, Harry Ross, 6525 Detroit Ave., Dundalk, Md. Possessing two grey squirrels in close season; Hunting with non-resident license	70.00
Yucha, Steve Joseph, Box 13, Jere, W. Va. Hunting without non-resident license; Killing grey squirrel in close season	60.00



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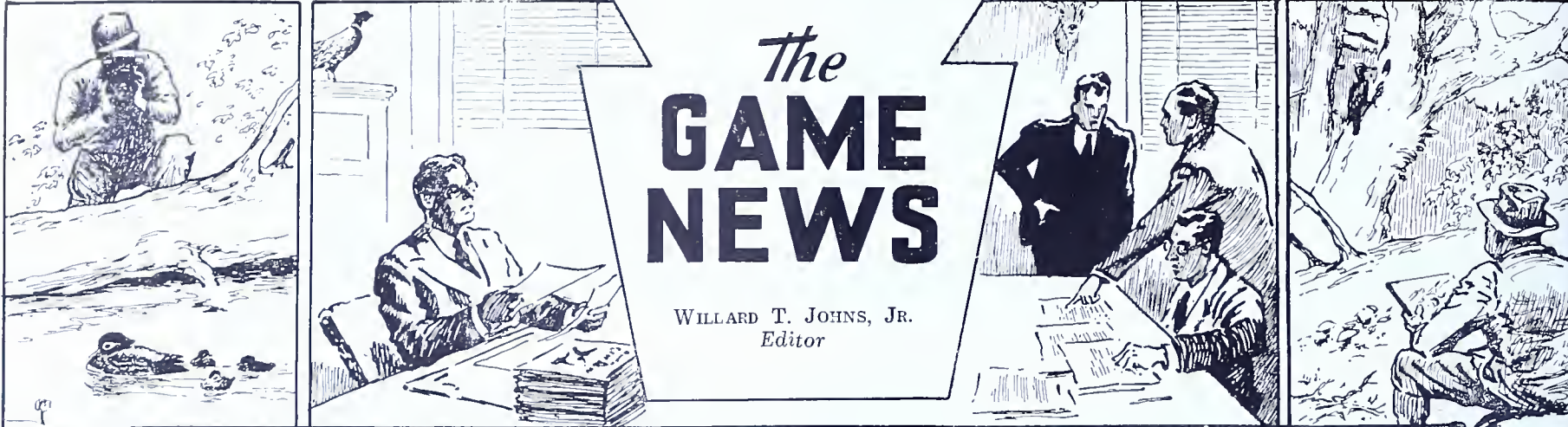
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FEBRUARY 1950

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The GAME NEWS

WILLARD T. JOHNS, JR.
Editor

PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA

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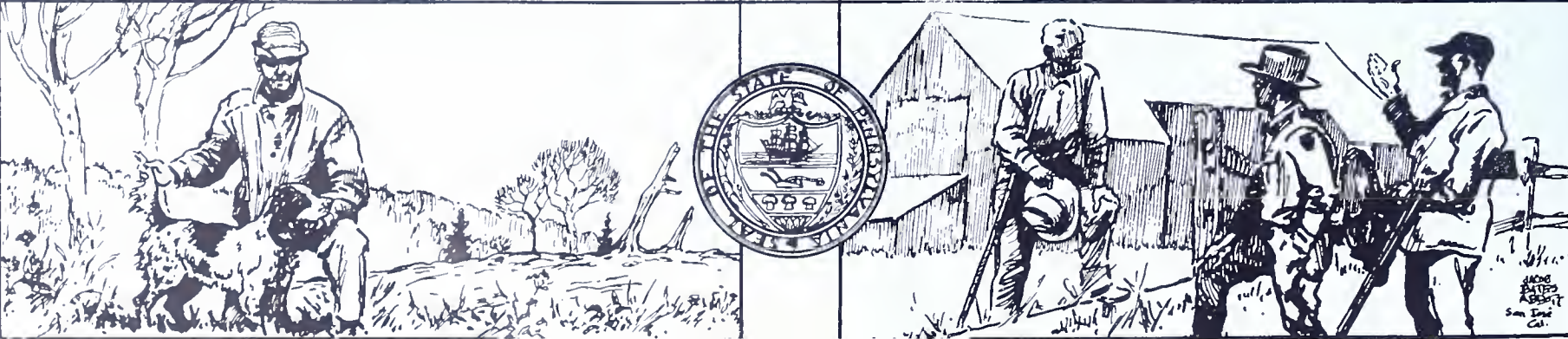
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THE NEED FOR SPORTSMANSHIP

The wise philosophy contained in a recent publication, "Saga of the Waterfowl," strikes straight at the hearts of all true sportsmen. Its simple dedication—"To my three sons who are the best reasons I have for being a conservationist as well as a gunner"—is impressive enough in itself to make us all take stock of ourselves. In this simple statement is a truth so real and so challenging that none of us can afford to ignore it.

And yet, as eighteen pages of this magazine testify, that truth is being ignored, evaded, and violated. One look at this list of violations raises grave doubts as to the wildlife heritage we will hand down to our children. Unlike the rolling stone, game law violations tend to gather the "moss" of more violations. Instead of taking less space in this magazine, the list is growing. It contains more names now than it did a year ago at this time. The wave of lawlessness in God's great out-of-doors apparently is at tidal proportions. The future of the true sportsmen is endangered by the actions of a small minority of hunters. Let it continue and our children will be handed an empty platter of a priceless outdoor heritage—the right to hunt—but what?

If the names of the thousands of fine and true sportsmen—real "gentlemen of the out-of-doors"—in Pennsylvania were listed, they would overflow the pages of this magazine and those of many issues to follow. But, ironically, the publication of a sportsmen's list would probably be little noted and not long remembered.

Public opinion demands the branding of game law violators in the same category as other "law breakers." Because these violators "cheat," each true sportsman will have to be more of a conservationist, less of a gunner! Each sportsman will have to be a leader; all will have to set an example and help teach the pleasures and benefits of good sportsmanship. As long as game law violators exist, they must be brought into the halls of justice—and they will!

The axiom "In Right There Is Might" can be expressed by predicting that "Good Sportsmanship Will Eventually Win."

* * *

PROMOTE GOOD SPORTSMANSHIP — ALL WAYS AND ALWAYS



under the hemlocks

N. R. *by* CASILLO

THE FULL moon shone brilliantly on the fresh snow, the glistening green of the hemlocks contrasting eerily with the thick layer of white burdening the drooping branches. The vast wilderness between Marienville and Kelletville in Pennsylvania's most sparsely populated county lay locked in profound winter sleep.

In a little glade on a tree-covered hillside overlooking Buzzards Swamp the moonlight glared balefully upon the seemingly lifeless expanse, the unwavering orb accentuating the shadows to the hardness of etched lines.

In the deepest shadow beneath a low bough at the edge of the glade a furtive movement caused a bit of the fluffy snow to fall to the unsullied surface. For a few seconds following the cataclysmic disturbance the creature causing it pressed its tiny body to the yielding fluff until only its wriggling, be-whiskered snout was visible. Survival in the wild depends upon perpetual vigilance and the apprehensive animal dislodging the bit of snow knew it only too well.

After making sure that his rash act had not attracted any lurking predators, the shrew, for that is what it was, went his way, the scarcely perceptible weight of the diminutive body tracing a delicate pattern in the new snow. Even so brash and headstrong a creature as the shrew paused at intervals to reconnoiter with his sensitive nose, the flexible snout turning this way and that to sample the air currents while his minute yet functional eyes peered into every lurking shadow.

In the dogged manner of his tribe the animal pushed on until his pathway was blocked by a patch of brilliant moonlight. He knew that to expose himself even momentarily courted possible death, so he sought a way to circumvent the spot. First he turned one way and then another, his twitching nose



repeatedly leading him back to the starting point, for what he sought lay practically in the center of the brightly lighted area.

Shrews are not given to much deliberation, their restless bodies seeming to be at loggerheads with what little restraint they possess. So, after executing half a dozen sallies in either direction he plunged from the shadow and started for his objective. If the glance over his shoulder when he passed into the alien light was one of apprehension it was belied by the silent snarl that appeared on the peculiarly sinister face.

The scurrying feet of the little Insectivora had scarcely cut a dozen prints when a shadow engulfed him. Indeed, the shadow was responsible for saving his life. A foraging screech owl had spotted the shrew and was still some feet away when the latter apprehended his fearsome enemy. Without pausing in his headlong plunge the shrew burrowed into the snow at about the same speed with which he had trod its surface. The owl struck at the spot where the animal disappeared but clutched only a smother of snow.

The shrew was not one to brood over narrow escapes since they were more the rule than the exception. Scarcely missing a stride he continued on to what his nose now indicated as being near. In a moment his headlong pace through the light snow was halted at the bedraggled and frozen body of a red squirrel. With a ferocity unbefitting his size,

the shrew tore into the carcass with both tooth and claw.

Shrews and their kin are forever hungry. If deprived of food for more than a day they are likely to succumb to the pangs of hunger. In seconds the animal was gorging himself with bits of the frozen flesh. After stuffing

himself to repletion he completed an elaborate toilet and then curled up alongside the dead rodent for a luxurious sleep.

Even if he could comprehend such things what the shrew did not know was that the squirrel was part of a mink set put out the day before by Dwight King, a pipeline inspector who did a bit of trapping on the side, and what the Fates had decreed were not at all in keeping with what the trapper had reckoned.

Severe storms and other uncommon natural phenomena often disclose unusual things about a region. This in turn affects the denizens of the area so that they too manifest unusual behavior. During severe storms ordinarily furtive woodland creatures are likely to lose their customary caution. In their attempts to secure food they frequently take the long chances that all too often prove their undoing. Dwight had hoped to catch a mink, a particular old boar mink who regularly made the rounds of Buzzards Swamp and environs and would have doubtlessly accomplished his purpose had it not been for the series of circumstances precipitated by the shrew. In the wild singular results often stem from the most commonplace incidents.

Mink, like most wilderness dwellers, are creatures of habit. Like deer, foxes, snowshoe rabbits and other woodland inhabitants, they have a regular range which they sporadically traverse. Almost unfailingly a mink can be depended upon to retrace his steps at irregular intervals. Days or even weeks may lapse between complete circuits of the range, but eventually the animal will again show up at familiar points.

Obviously, the habit enables all who practice it to become thoroughly familiar with their environment, a knowledge which serves them in good stead when evading enemies or in seeking food. However, most trappers are entirely familiar with this trait of the wild kindred and put it to good use.

(Continued on Page 24)





PREDATOR CONTROL

by
MANLEY F. MINER

SINCE I am now fifty years of age I can say with authority that as I grow older, more and more fully do I subscribe to the theory of game management propounded by my late father, and to his philosophy expressed in the following quotations from his writings:

- (1) "Nature is wonderful; Man is more wonderful; God is most wonderful."
- (2) "Man is Nature's first assistant, or God's viceroy. What is man without God, and what is God without man? They are—or should be—partners."
- (3) "God put the birds and animals here for man's use and for man's control. The same is true in regard to plant life. God made the weeds at the same time that He made the vegetables, but it is man's job to destroy the weeds so that vegetables good for man can exist."

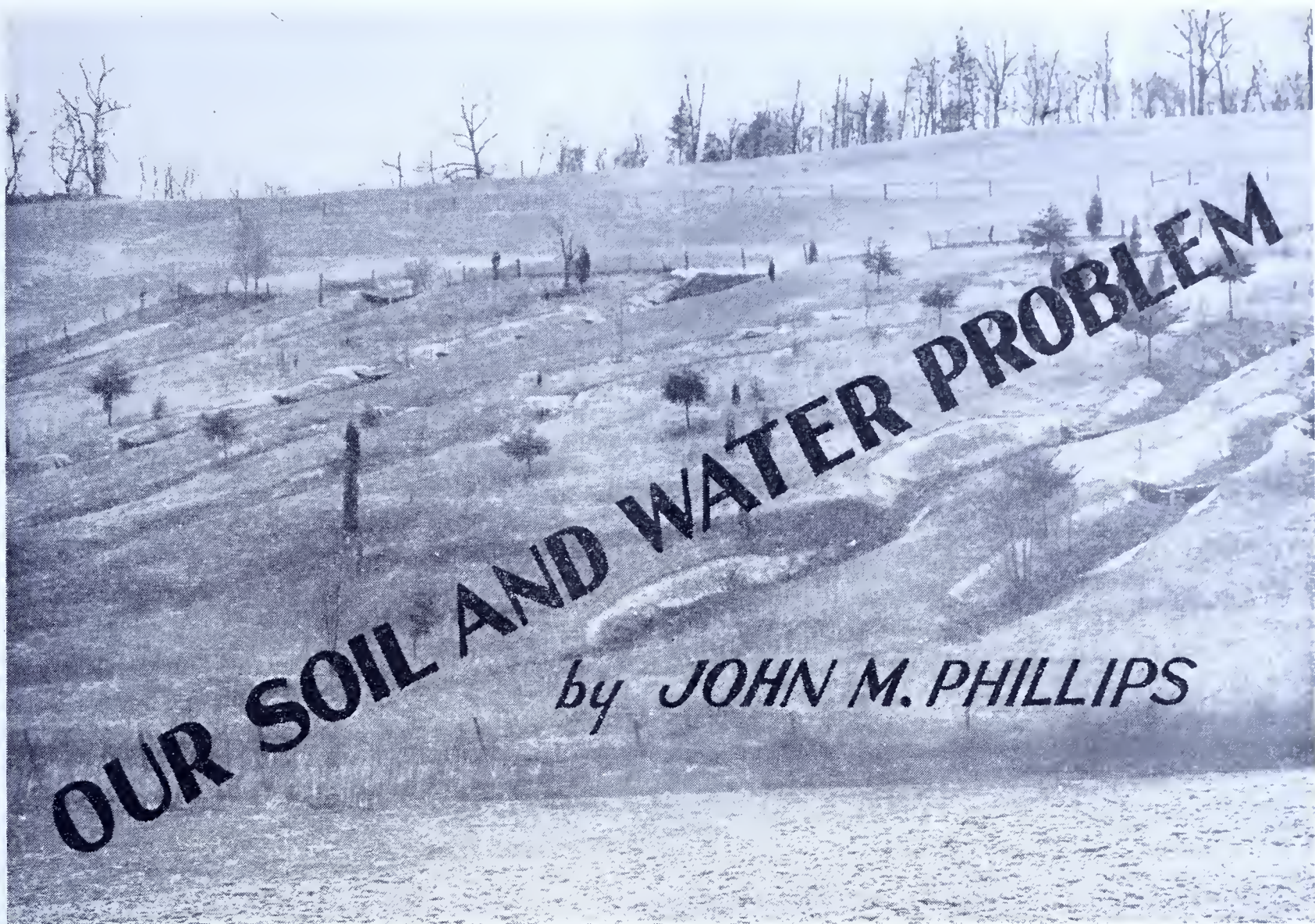
In this beautiful world we have two schools of thought on this point. One school is composed of those who believe that if a hunter shoots certain species of hawks, coyotes or a timber-wolf, man is upsetting Nature's balance. That might be true if man never had shot a game bird or animal for food; but the minute man shoots a deer, man upsets Nature's balance, and it becomes his responsibility to reduce, in turn, the enemies of the deer in the same proportion. If a man shoots a half dozen ducks, for food, Man upsets Nature's balance unless he also slaughters the crows, and other enemies of the ducks, to a similar extent.

I shall never understand how it is that some students of Nature hold out for the protection of such predators as the great horned owl, or the common red fox, in localities where pheasants and upland game birds are so scarce that the hunter is allowed only two days' or a week's open season. A single specimen of the predators named would kill at least one game bird daily. Or let us put it this way; we have laws to restrict man's killing of game birds to two days in the year, but at the same time protect those predators that commit the same act three hundred and sixty-five days a year!

The other school of thought consists of those with whom I desire to be classed, namely, the ones who believe in man's control. For illustration, if the potato vines are attacked by potato bugs I believe in using Paris green, not in waiting for God to send some other insect to kill the potato bugs. It always has seemed foolish to me to see a group of sportsmen hopefully liberating young pheasants, hatched at a cost of hundreds—yes, thousands—of dollars, while the Game Commission, sitting in offices in the Capitol buildings, have no program for the control of predators and take the comfortable attitude that "Nature will balance itself." The fact of the matter is that here, at our Sanctuary, we have known one small weasel to kill thirty-two young pheasants in one night. Some people will say, "But that happened on a congested area,—on a Sanctuary." My reply to that is: "The habit of a predator is the same outside such a game preserve as within its borders."

And in referring to pheasants, let me observe that recently a new school of thought has sprung up which is opposed to the propagation of this game bird. Even the editor of one highly respected conservation magazine appears to have adopted this attitude, for in a recent issue there was published a picture of pen-raised pheasants, which was captioned: "Money Wasted." I cannot agree with that opinion, because there would not be a pheasant in North America if Man had not imported, propagated, and liberated them. I believe in propagation, plus predator control, and, in addition, food, shelter-belts and proper habitat provided. It may happen that in a particular locality, one of these features is more essential than the others; but in a general way, one is as necessary as the other. Certainly all are highly needful. To illustrate my point; It would be foolish indeed to liberate pheasants in the Fall, where there was no food or natural habitat; because an ice-storm for instance, which would cover all food, would mean the annihilation of every pheasant within a week. It is equally

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FOR centuries prior to the discovery of North America by the white race, countless beaver were building dams in the rocky ravines at the head of streams, thereby making many lakes and conserving the top soil.

As the silt filled their lakes, the beaver raised the dams higher until finally the silt formed land practically level with the surrounding area. When the beaver abandoned the dams at this stage and moved farther down stream to continue their work, fine timber began to grow on the meadows they had created. Thousands of these fertile tracts, called beaver meadows, irrigated by streams, are scattered throughout our land.

Then came the white man, like a termite, wrecking this paradise. By the use of the axe, fire, sawmill, gun and plow, together with the drainage and pollution of our waters, the importation of noxious fish, birds, insects and blights, and the commercialization of forests and wildlife, he has almost destroyed this paradise of the Indian conservationists.

In my lifetime of eighty-nine years, I have seen much of this desecration throughout the North American continent and especially in our own state of Pennsylvania, owing principally to the cutting of our forests, mining operations, our old-style plowing, the pollution of our waters and to the fact that the state is over-run by about a million browsing deer. These deer have not only destroyed their own food but the food and cover of our small game. In many sections they have destroyed the ground vegetation and the foliage to a height of seven feet, thus increasing our watershed problem. In some areas it is impossible to grow trees or crops without an eight-foot deer fence, financed by the game fund and consequently there are thousands of eroded, abandoned farms throughout our state.

Today many of the springs and streams in which I once fished, have dried up so that for want of surface water our water table is constantly being lowered and we are on our way to becoming an arid area. Also we are constantly losing our topsoil.

We may become like the people of China who must carry silt from the river flats in baskets on their heads to their denuded upland farms and gardens. It required centuries for the Chinese, working with their crude farm implements, to exhaust their soil. We, today, with our modern machines have demonstrated that we can do it in the near future if we do not reform our methods.

We have built and are building many roadway and railway fills near the heads of ravines or hollows with culverts at the ground level which allow the water to rush downstream carrying topsoil from the farm which later must be dredged from our navigable rivers and lakes or lost in our oceans.

Let us, in addition to digging ponds and lakes on farms, imitate the beaver by utilizing these fills as dams by raising the entrance to the culvert to form a pond or lake and catch the topsoil from the land above. As the lakes so formed gradually fill with silt, the entrances to the culverts can be increased in height and may eventually cause the formation of large fields of rich topsoil. The fill can be riprapped when necessary with field stone or concrete to protect it from disintegration.

The game refuge at the head of Pymatuning Lake is an outstanding example. Pymatuning, created by one of the first flood control dams in our state, is an underflow lake of 16,000 acres covering what was, in my boyhood, a great swamp, and controlling the water supply for the cities and manufacturies of the Shenango valley. This lake, authorized in 1912 by my life-long friend, the late Governor John K. Tener, was dedicated to hunting, fishing, sailing, rowing and canoeing, and if airplanes had been used for planting, would, have become one of the greatest wild waterfowl flyways in America. But like most other lakes in Pennsylvania, it has now been turned over to motorboating. Our sportsmen now own and control about 900,000 acres of hunting grounds and game refuges, purchased with part of their license funds, on which there are only a few small lakes. Consequently, we propagate and kill few waterfowl and shore birds in our state.

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The HUNGER MOON

by Ed Shearer

UPON opening the door of the camp my face was pelted with snow which a lusty gust of wind had picked off the low hanging hemlock branches. The lamp at my back danced and flickered in its bracket as I read the thermometer nailed to the door jam. It stood at zero and zero was cold on a night like this, even to those of us who by the nature of our occupations were used to the forests in winter.

After closing the door, I returned to the fireplace and my comfortable chair, a seat that had long since lost any resemblance of its original beauty. Here I watched the flames as they danced up through the dry chestnut logs, backed by oak. This combination gave a quick and lasting heat and one could well imagine how, in our great grandfathers' time and on such a night as this, the family would gather round a similar fireplace. The fire's mellow glow would highlight the ruddy faces as the apples were snitized and the tangy cider sipped.

The idea, I mused, of the District Forester spending a winter with the game might pay big dividends. We were trying to find a workable plan that would produce the highest return in wildlife and timber. There were sizeable areas now producing nothing and erosion was taking its toll. Planting was impractical since the deer ate the seedlings faster than we could plant them. As a result of this lack in food and cover, small game was declining at an alarming rate. On the other hand, visitors to the forests were increasing fast and demanding more. They were able to see plenty of deer in the vacation season but they didn't see the deer dying in winter. And it was to winter that we turned for the answer.

One primary road was kept open with a plow and feeding was carried on from this road by toboggan and snowshoes. A load would run from one to three hundred pounds, depending on the condition of the crust and slope.

After watching two old does trying to commit mayhem on each other and after seeing that the young deer were chased away by their elders, feed shelters were done away with. We continued, however, to use shelters for turkey and grouse even though the latter seldom used them. Then, for the deer, we tried a scheme in which tin bands about one inch wide were used. These bands were passed around trees and the ends twisted tight after nails were driven through them at four inch intervals. Then ears of corn were stuck on the nails and the bands could be adjusted to any desired height above the snow. Scattering these improvised feeders in the feed area gave the small deer a chance.

January lived up to its name of "snow moon." Snow followed snow. Now in February it lay deep in the valleys. Blasts of shifting winds were daily adding to the heavy hand nature was laying on the land. The cold continued unbroken to make conditions worse.

There were eight bands of deer yarded up and depending on me as their meal ticket. They were only a small part of the population on this range but even at that, I was playing a losing game from the start. Poor winter browse and deep snow made ground forage out of the question. The deer had been steadily losing weight and the point had been reached where any further loss would be paid for in the coin of heavy

mortality. The bad feature of it all was the fact that the colder it got, the less the animals would eat. Just when they needed it the most, they ate less food.

Thus, the opening of this story found me staying over in a camp high in the mountains. The morning broke clear with the temperature ten below. It was the kind of morning on which you linger indoors over an extra cup of coffee. Making the fire safe, I closed the door and secured it with its rusty spike. While adjusting snowshoes, my eyes roved over the toboggan. It was loaded with three hundred pounds of yellow corn, nails, axe, and tin bands, while on top rode my 220 Winchester—goshawks had been drifting in. On my last round, I had glimpsed a rare visitor—a snowy owl ghosting through a thick stand of hemlock.

I picked up the toboggan and shuffled off down the basin. The rasp of the loaded toboggan gripping the newly formed crust made a loud racket in the dead silence. Only two months ago, this space was overrun by a small army of men, fired with the lust of the chase. The din was terrific—now the silence was deafening. Their kill was small when reckoned against the levy an overburdened nature was exacting, and certainly more humane. Coming into the trail that pitched down into a long deep hollow, I paused on a jutting point. Stretching to the horizon, mountain range piled upon range. Not a living thing moved in the glasses yet I knew that every hollow held its quota of hungry animals.

The pull of the slope suddenly seized the toboggan. As it picked up speed, I piled on. Rounding the first turn, old man gravity really took things over. The hemlock and

laurel thicket marking the feeding station was plumb in front of me in nothing flat. My vain efforts to brake only served to throw the toboggan from the trail. Down through the submerged brush and laurel thicket, right smack through a bunch of startled deer, I rode that juggernaut, ending up with a solid bang against a stump. Corn, axe and equipment went in one direction; I went in another; and deer went in all directions.

"Well, that's one way to unload a toboggan," I thought to myself. Brushing snow and feeling gently for sundry cuts and bruises, I looked up the mountainside and took in the deer and their various attitudes. Laughter overcame me. Deer can be as expressive, emotionally, as a dog, horse or man. Some stood pop-eyed. Some poised for flight. An old doe stood staring, cocking her head this way and that—a perfect imitation of the countryman at his first fair who just saw the man shot out of a cannon. And still didn't believe it!

Then my glance took in two deer standing heads down at the far end. It's a short step from comedy to tragedy in nature. A careful look through the glasses told me there would be two less deer to feed on my next round. One was a fawn—victim of nature; one was a young buck—victim of poor shooting.

Quickly I made the rounds, placing ears of corn on the bands. When I had finished, every tree in that area sprouted strange fruit. No actor ever played to a more attentive audience. Heavy snow is the worst misfortune that can happen to game. It hides their food and makes it hard for them to escape their enemies. These deer supplied the evidence themselves. The larger ran from fair to poor, all showing markedly the effect of severe weather conditions. The small deer told the story. Not being able to reach up in competition for food with the big deer, they ran from poor to bad. Without help, their chances of surviving were very small.

With empty toboggan I made the climb back for more loads and more stations. The picture was much the same until I came to the "Old Lady." I believe she presented a true picture of why there was no winter kill problem in the old days as well as the reason for our trouble today. The Old Lady was a large doe with a left front leg shot off. I made her acquaintance shortly after deer season. The wounded stump was a healthy dull red with no evidence of infection. Her tongue had been a good doctor. Together with a small doe, she made her home in a dense hemlock thicket in a hidden pocket in a large basin. The spot was well protected from the winds and a stand of white and red oaks that had borne a heavy crop of acorns was nearby. Stretching down the basin was a good supply of aspen, birch and maple browse. For a few weeks this deer was fed plenty of corn to offset the drain of the wounds; then she was left on her own and watched closely.

February found deer folding up five miles

away while the Old Lady and her "maid" were coming right along. You would see them in the oak stand pawing up acorns—the young doe doing all the work and the Old Lady with the air of an Irish foreman shamelessly mooching. The spring break-up found them not sleek and fat but strong and able to make the grade. The feed in their area, however, was practically cleaned up and gave me a fairly accurate picture of just how much feed per deer it takes. That figure makes spasmodic cutting look futile and the cost of artificial feeding prohibitive. It further demonstrated that deer, even under a severe handicap, can survive rigorous conditions provided they have adequate food and shelter. Note that deer within a few miles of these does were dying, even with some help, while through the toughest period of winter these two were given no help at all.

Sometime later I sat before the fire in camp. The spring break-up was well advanced and the rain splashing off the roof was a welcome sound—rain that was washing the snow away and releasing hidden food for the hungry survivors of winter's merciless grip.

"Where do we go from here?" I thought. There is no doubt of the seriousness of our forest situation. Our range has been overbrowsed for years. It is in much the same condition as a run down farm. To complicate the situation, a good portion of the forest is second growth timber with a crown canopy that is wiping out food formerly available. We are still thirty to forty years away from cutting and we also run into the problem of soil and water, vital to all life including human life. Add nearly a million hunters with automobiles, roads extending through most of our forests, and the picture is complete. The final answer, I

believe, is up to the sportsmen themselves. They can make a start by chucking sentimentality and that shopworn shibboleth that the doe is a sacred cow.

Game is stock, subject to the same natural laws and requirements as cows, pigs or chickens. It's the glamour that makes it look different. No farmer or stock raiser would attempt to operate under the conditions that face the managers of our deer herd. They know too well the fallacy of putting fifty cows in a ten cow pasture—especially a run-down pasture. In the fall, the available feed and shelter determines the amount of stock they carry through the winter. They never make the mistake of buying stock and then trying to grow feed. They can't afford waste—it means bankruptcy.

I believe the disappointing showing of game in the forest is due to our reluctance as sportsmen to accept as a fact that we are trying to grow feed for stock we bought long ago—and we are not catching up. The bitter pill is that we won't catch up at the present rate until nature does it for us the painful way.

Our one out is to harvest the game crop heavily to get it into balance with the food supply. The day we do that, I believe Pennsylvania sportsmen will see the greatest game food and cover program ever attempted put into effect. In five or ten years such a program could double or triple the number of shootable deer as well as bring the grouse and rabbits back to the woods.

Now the fire has burned low and the rain grown harder. The bunk beckons. Here is another spring. There will be another summer, another fall. There will be more broods of birds; newborn fawns will gambol over the ground other fawns died on last winter. I wonder who will harvest the crop this year—the sportsmen or the Hunger Moon?



NORTHERN HUNTERS



PENNSYLVANIA winters bring not only snow, ice, larger fuel bills, Santa Claus, tire chains and tough feeding conditions for quail and turkey, but also some of North America's most interesting birds of prey. These northern raptors invade the New England and Middle Atlantic states in fluctuating numbers every winter and the majority of them are distinctly ambassadors of goodwill to conservationists, orchard owners and farmers. To lovers of winter wildlife and to that intrepid clan of bird watchers, who know neither cold nor fatigue, they add exciting memories to days spent afield.

I offer you a picture: a scene along the frozen Delaware River marshes, not far distant from the sprawling outskirts of Philadelphia; limitless acres of stiffly-bent reeds, rimmed and crusted with white, cut in cameo-like relief from the leaden sweep of the winter sky. Dark withered skeletons of alders and willows stretch thin, bony arms at awkward angles from their gnarled

stumps. Two great dark birds perched motionless in the bare branches of one of the distant trees, etched in jet against the grey sky, like the black cut-outs of a hand-forged weathervane. To the right of the tree and further away over the frosted sedge flats a black speck appeared, growing larger with each stroke of the wide wings, until a very dark, large hawk came into the high foreground, body swung at a vertical angle to the ground, the black-tipped, white-lined wings beating rapidly and the booted legs lowered for action. This was a big American Roughleg, born, likely, on a crag in the treeless wastes of Ungava and wintering on a diet of southeastern Pennsylvania meadow mice. Largest of the BUTEOS, which include the red tail, red shoulder and broad wing, the roughleg has a wingspread of four and a half feet and, like the golden eagle and the majority of owls, has his legs feathered to the toes. The plumage is very varied but that most

By JACOB BATES ABBOTT

often seen in Pennsylvania is the dark phase—a blackish-brown bird with large white patches under the wings and a white area in the basal half of the tail. "Black Hawk" is his common name. He is a field mouse-catcher par excellence and feeds almost exclusively on these destructive rodents during his winter excursions in the United States. Lemmings form his chief diet in his sub-arctic homeland. As long ago as 1895 the U. S. Government (Department of Agriculture) classed the American rough-legged hawk as **WHOLLY BENEFICIAL**. Their chief research scientist, Dr. A. K. Fisher, after extensive field observation and analytical stomach examinations, stated, "The roughleg is one of man's most important allies against meadow mice, feeding on little else during its six months' sojourn in the United States. It thus renders important service in checking the ravages of these small but formidable pests. The roughleg is somewhat crepuscular in habits, being on the alert during twilight and early dawn, when small mammals are most active. The writer has made careful inquiries of a considerable number of persons who have had extensive field experience where these birds are common and in no instance has he heard of their attacking birds. Even better evidence is found in the fact that stomachs of specimens shot in locations teeming with waterfowl contained nothing but the remains of meadow mice." In your Game Commission's recent (1948) booklet, **PENNSYLVANIA BIRDS OF PREY**, researchers Robert McDowell and Leo Luttringer found that the roughleg's diet was 96% beneficial to man's interests. This hawk is protected in Pennsylvania.

Considering that, in one year, near Rochester, N. Y., nurserymen took losses of \$100,000 to stock through ravages of field mice and that as many as twelve mice have been found in the stomach of one dead American roughleg, it is evident that any gunner who shoots one of these hawks is actually lifting cash out of the pockets of nurserymen, orchardists and other agriculturists. If anything more is needed to enlist your support to insure the absolute protection, demanded by Pennsylvania law, to this master of hush-winged flight, this destroyer of farmers' enemies, this big, black American rough-legged hawk, let me again quote Dr. Fisher (Biological Survey Bulletin 3; 1893): "The roughleg . . . may be seen in the fading twilight, watching from some low perch, or beating with measured, noiseless flight, over its hunting grounds. It follows two very different methods in securing its food, one by sitting on some stub or low tree and watching the ground for the appearance of its prey, as the red tail does; the other by besting back and forth just above the tops of the grass or bushes, and dropping upon its victim after the manner of the marsh hawk. Its food consists principally, if not almost exclusively, of the smaller rodents, meadow mice and lemmings . . . the latter doing irreparable damage

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LAST TRIBUTE TO A COONHOUND

By FRANK J. FLOSS

YES, "Old Bid" was what coon hunting men call a real cooner. Most of the 12 years of his life he spent on the trail of the elusive raccoon. And if all the coons he treed were laid end to end, I'm sure they would stretch in a furry trail clear to his happy hunting ground. Likewise, if all the hunts of his were put into words, it would take many volumes to encase them.

Although, "Ole Bid" has been dead for several years now, they still tell tales of his ability as a coonhunter. Very often when there is a gathering of these hunters of the night, you hear some old cooner mention the name of "Old Bid," and wish he could find another dog like him. His greatness as a coonhound was the result of his love for a fight, and the joy he got out of trailing the raccoon, under the star lit skys. Moon out, or moon under, it made no difference to him, he would find and tree coon when other dogs couldn't even pick up a cold trail.

However, "Old Bid" didn't look like the usual run of coonhounds, who sport long flapping ears, above a rangy frame. He in reality, and to be truthful, looked like a fugitive from the accepted picture of a coonhound. He was a small beagle like dog, with short ears, short legs, and a coat of brown hair that looked like it had been crossed between a burr weed and a shoe brush. His looks nevertheless belied his ability as a coonhound, and saved him many times from dognappers, who several times invaded his kennel and picked up skunk hounds that just looked like coonhounds.

Through the years I've hunted with a great number of coonhounds. But none of them compared with "Old Bid." I'll never forget him for some of his coonhunting feats were almost unbelievable. Often times when sitting in my favorite chair at night, after the rest of my household has gone to bed, I look out of the window at the pale moon shining up there above the dark earth and relive some of those past coonhunts in my dreams.

I often recall the night we were hunting "Old Bid" in the woods of Hickory Valley. The night sky was blanketed by low heavy clouds that obscured the moon and stars, and it was very dark in the heavy timber. And I, and several companions were leaning against a big red oak talking when we heard "Old Bid" make a strike, and begin to tongue

on the track of a coon. He didn't sound very far away, and from his long drawn out barks, we knew that he had struck a cold track, and just stood and enjoyed the music of his trail bark as it echoed back and forth in the valleys cool night air. However, it did not take him very long to work out the cold track, for suddenly he changed the tempo of his barks, and started to emit short fast barks, the sign of a hot track. We judged from his position that he must have jumped the coon in the corn patch below the timber. The chase was on! The coon took out as fast as he could go, and headed for the tall timber, with "Old Bid" in full tongue right behind him. After traveling about a quarter of a mile with "Old Bid" right on his tail, the coon decided he had enough and climbed a tall tree. From where we stood listening to the chase we heard "Old Bid" give out with his three bark, so we started out. However, when we were about halfway to the tree, he stopped barking. We stopped, too, confused, wondering why he stopped barking. Five minutes passed without a sound from "Old Bid." Then to our surprise we heard him again, but not at the tree. He opened up again down in the corn patch where he first jumped the coon. This time he ran what sounded like the same course, and ended up at what we thought was the same tree. When we reached the tree he was barking and trying to climb. One of the fellows searched the tree with his five-cell flashlight and picked out a small coon trying to hide in a crotch about halfway up the tree. A shot from his twenty-two pistol brought the coon down to the ground where "Old Bid" grabbed him and shook him until he quit moving. I then held "Old Bid" and we sat down and tried to dope out why he had run the same trail twice, for he had never done it before. However, "Old Bid" was not satisfied he kept whining and trying to get out of my grasp, so I let him go, wondering what he was up too. He walked over to a tree about fifteen-feet from the one we had got the coon out of and after smelling around the base of it, started to bark tree again. Surprised at his antics, we got up and shined the tree, there to our amazement we spotted another coon. Even after we shot the coon down one of my companions said, "I still don't believe any dog can be that smart. It was just a coincidence that

those two coons ran practically over the same course and treed fifteen-feet apart."

Maybe "Old Bid" wasn't smart in the human sense of the word, but this I do know, he sure knew his coon!

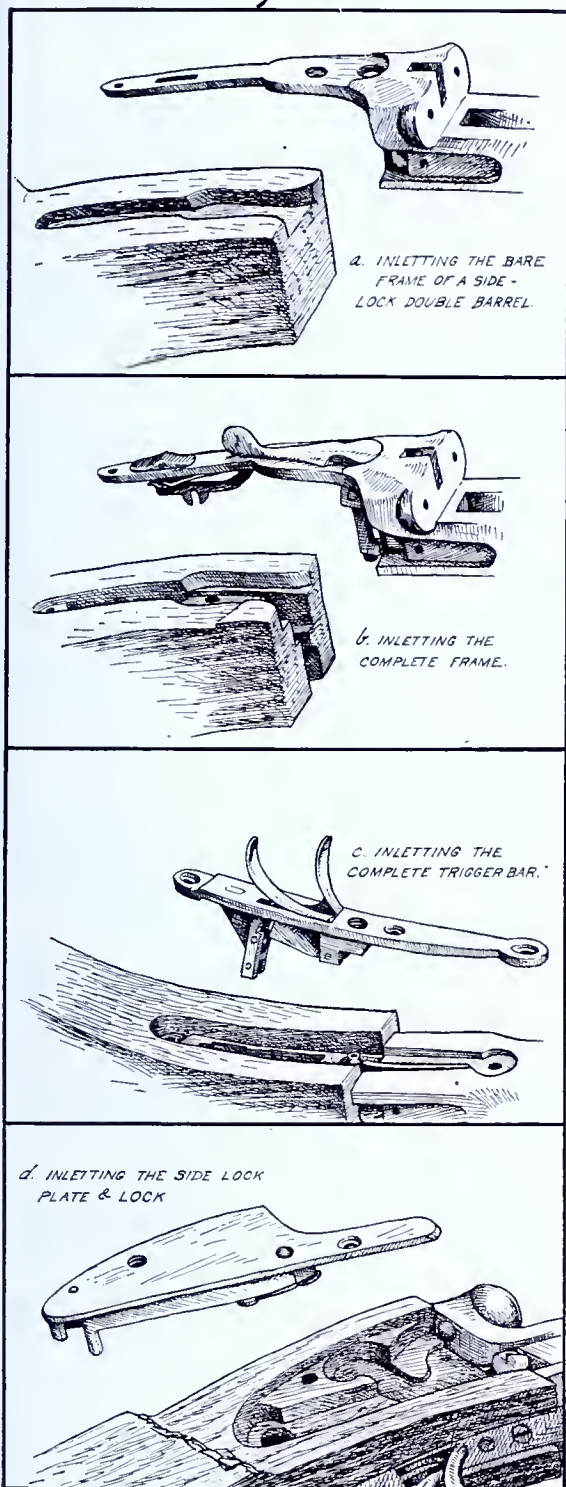
Another hunt I often recall, is the one in which an old buck coon just about put an end to "Old Bids" coonhunting nights. "Old Bid" had been trailing this smart coon for about two hours, but he refused to tree. However, he began to tire, and when he came to a stream he swam out to the middle of it and crawled upon some brush that had become lodged there on a protruding rock. As we neared the bank of the stream "Old Bid" was baying the coon for all he was worth. But, when he saw our lights nearing the stream, he jumped into the water and started to swim out after the coon. We tried to call him back but he paid no attention to us. He swam over to the pile of brush the coon was on and began to circle it in an effort to crawl up on it behind the coon. The coon however, knew what he was up to and he followed "Old Bid" around. Every time the dog tried to crawl upon the brush, the coon would take a swipe at him with its paw and knock him back into the water. We kept our lights shining on the dog and coon, and I could see that "Old Bids" ears were covered with blood where the coon had clawed him. We kept calling and trying to coax him away from the coon, but he ignored us. He was out to get that coon or die in the attempt. He kept circling and trying to get at the coon at the same time. I was afraid the coon would jump on him in his tired condition and drown him, so I started to take my clothes off, so that I could wade out and get him, but that was a needless gesture. For the coon on one of his lunges stepped on a frail part of the brush, and it caved in and dumped him into the water. In a flash "Old Bid" grabbed him, and the water boiled as they thrashed about in it. We couldn't tell one from the other. However, in a few seconds the fight was over and "Old Bid" started swimming for the shore with the coon grasped in his powerful jaws by the back of the neck. He had broken the coon's back with a crunching grip of his jaws. He swam over and crawled out on the bank and dropped the coon at our feet, then shook the water from himself and stood looking up at us wagging his tail—as much as to say, "Well there he is!"

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An Introduction to Stockmaking

BY E. STANLEY SMITH

Figure 1.



IN CASE you haven't noticed, there are more different kinds of shotguns floating around the country than there are starlings in Capitol Park. Doubles, over-and-unders, pumps, autoloaders, singles, bolt-actions and even a few ancient lever actions can be found—and most of these in several different versions. Naturally it just isn't possible to explain the inletting of each of these shot-slingers here, so you'll just have to use a bit of imagination and adapt these instructions to your own particular gun.

Let's begin with the difficult side-lock double barrel shotguns such as the L. C. Smiths, the Bakers and various foreign makes. The first step is to dismantle the gun.

Part II: Inletting shotgun actions.

Yank off the fore-end and unhook the barrels. Then take off the side-lock plates. Next remove the trigger guard and withdraw the two tang screws (the front one is hidden beneath the top lever), pull out the trigger bar and the action should lift right out of the stock.

Now, to simplify the inletting, most of the parts are stripped from the frame—the top lever, rotary bolt (if any), safety slide, safety spring, etc. As a rule the firing pins and cocking rods are allowed to remain in place.

Now, very carefully measure the distance from the rear face of the frame to the end of the tang, and transfer this measurement to the center line of the blank with a scribe or brad awl. Then measure the width of the tang at various places and mark these measurements on the blank also. Finally you will join these marks by drawing in the outline of the tang with a sharp pencil, using a straightedge wherever possible. This outline must be accurate and centered perfectly.

Now comes the actual inletting. With a thin-bladed knife follow this pencil line, keeping the blade slanted inward to match the angle of the sides of the tang. Cut lightly, at first, until a true, even line is established—then deepen it to about 1/16 inch deeper than the thickness of the tang. With the 1/8 inch waste allowance this will still allow 1/16 inch for final bedding. With a narrow chisel carefully remove the wood between the cuts. If the work was done accurately the tang should fit the cut-out portion with a minimum of bedding. This last-mentioned operation is a grueling task and you will do well to eliminate as much of it as you can by measuring and cutting as near to the finished size as your skill will allow.

Smear a thin, even coating of Prussian blue on the inner surfaces of the tang and frame that are to come in contact with the wood. Then slip the frame back in the stock, drive it tightly into place and inspect it closely to determine the width of the gaps between the metal parts and the stock. Remove the frame and you will see all the high spots on the wood indicated by a smudge of Prussian blue. If the gaps between the wood and metal were rather wide take an equally thick cut off each high spot; if the interstices were narrow take it easy with the final fitting and shave off very thin slices. It will probably be necessary to replace the frame dozens of times to get a perfect fit, but there's no substitute for patience and care—that's why particular shooters favor hand-made stocks. Each time you remove the high spots take a thinner shaving. During the last few fittings you will probably find it more convenient to use a scraper to pare off the wood as an edged tool is apt to bite in too deeply. When you can't see any cracks between the wood and

metal, and the entire face of the stock and the upper tang cut-out is a solid blue color you'll know that portion of the inletting has been brought to perfect completion. It takes a whale of a lot longer to actually do the job than to describe it on paper, but don't sacrifice perfection for the sake of a few more fittings and a little more scraping.

Before the final bedding is completed it's a good idea to be sure the drop is still O.K. Secure the frame in place with the receiver clamp and hook on the barrels. By stretching a string along the rib or using a straightedge the drop of the stock can be checked, and if not correct it can be adjusted during the inletting.

Now replace the top lever and safety assemblies and cut out the stock wood to receive them. Move these parts into all positions to be certain the wood is not limiting their action.

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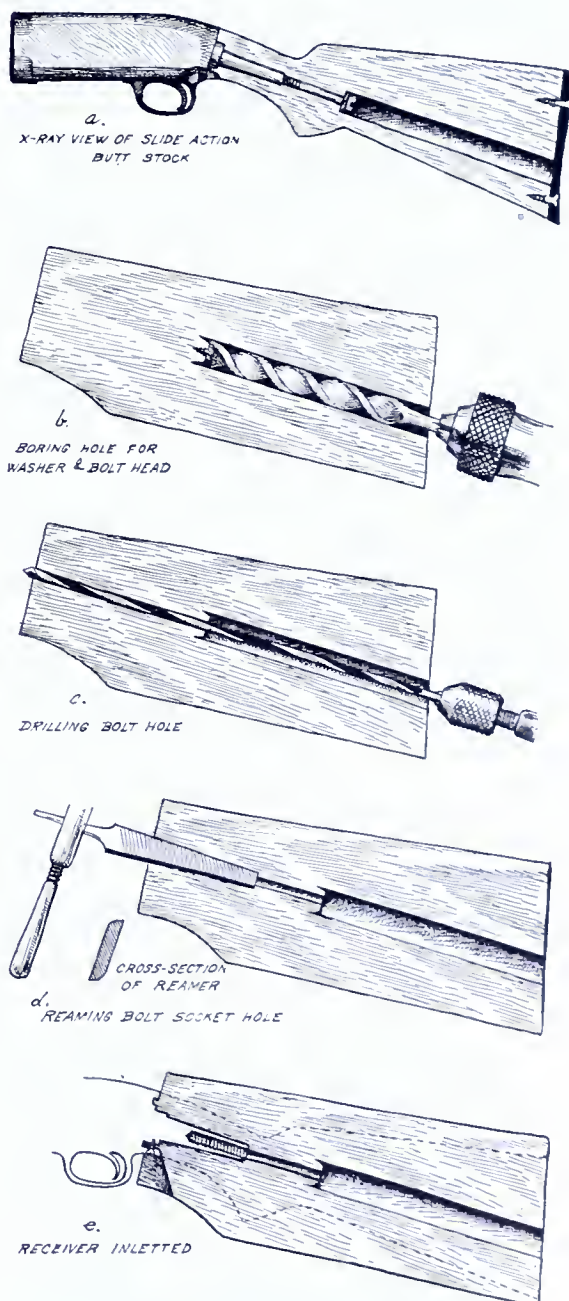


Figure 2.



While working on Farm Game Project No. 176 just outside of Ligonier the first day of small game season, I had the pleasure of witnessing what I think was an excellent example of the relationship that should exist between a father and his son who is just starting on his first hunting afield.

I was carrying a shotgun and wearing hunting clothes to be on the lookout for any ringneck hen shooting and while working through a big weed field, I caught up with two hunters traveling in the same direction. As I came abreast of them, the father spoke to his son who was probably fifty feet away and said, "There's another hunter over this way, son." The boy glanced at me and we continued across the field. As we approached the road, the father said, "There's a car standing ahead on the road," and the son replied, "I see it."

We stopped at the end of the field to chat and the father opened his gun and said to the boy, "Open your gun while we are talking, son." As we talked the father explained that it was the boy's first year of hunting and he was anxious that the boy be started right.

This example was so different from many cases of a boy starting to hunt and just being turned loose with the admonition, "Be careful." Many officers are having considerable trouble with youngsters hunting contrary to law that it was a real thrill to see this example of starting them right.—Assistant Leader John F. Blair, P-R Project 28-D (Farm-Game Development), Waynesburg.

In a patrol November 24 through Farm Game Project No. 154 with Deputy Smith, we saw a flock of about 50 robins. They seemed to be enjoying themselves in a pine thicket despite the fact that it was snowing.—Deputy Game Protector Robert Hengst, District D-10.



Most of the time, when anyone wants information about the best method to hunt a certain animal, he seeks out the old timer who has been hunting for a long time with the thought that he knows the ins and outs of the game. The situation was certainly reversed in this district this past bear season, however, and it looks like the old-timers will have to ask the youngsters' advice before going hunting. Three bears were brought into the Dupont-Avoca section and each one was bagged by a youngster. Joseph Lasota, Dupont, age 20, bagged the



largest bear weighing 550 pounds; Frank Chilek, Avoca, age 19, took second place with a bear weighing 400 pounds; and Merle Renfer, Dupont, age 18, took third place with a bear weighing 200 pounds.—Game Protector Stephen Kish, District B-12, Moosic.

Upon returning home from a grouse hunt in nearby cover, one of my setters made game at my open garage door on the way to the kennels. Thinking she was sniffing the bags of dog feed stored there, I gave her no heed. As I passed a window, however, there was quite a commotion among some empty crates inside, so I called her. To my surprise, she was at heel some distance from the open garage. Being curious, I investigated in time to see a grouse disappear under my car.

In spite of three dogs and a gun, I caught the grouse unharmed and thoroughly alive. It could happen once in a lifetime.—Commissioner John C. Herman, Dauphin.



While on night patrol along the shore of Lake Erie during November, we noticed something out of the ordinary. One stormy, windy night while moving slowly along a dirt road, we began to notice some big birds getting off the ground just ahead of the car. We jumped six of these birds in about a hundred yards, and identified them as Barred Owls. In the same area we began seeing "eyes" shining in the gravel along the edge of the road. Our curiosity aroused, we slowly approached a set of "eyes" and were amazed to see a Nighthawk fly away. We got within five feet of the bird before it took wing. During our patrol in that area, we saw at least fifteen Barred Owls sitting along the road and about twenty Nighthawks. The "Bullbats" would lay on the road and could easily have been run down if we hadn't stopped to let them fly away. Trying to find an explanation for this peculiar action is difficult. I have traveled the area for three or four years in different kinds of weather and at all hours of the night, but I had never seen any birds of this kind. Perhaps it was the strong south wind blowing that night which forced the birds to the ground.—Game Protector Clair Dinger, District F-1, Albion.

On the first day of the small game season, an albino ringneck pheasant was killed near Harrisville by Frank Glomb, 507 Willo Street, Springdale. I did not see this rare specimen; however it was quite a curiosity around this community.—Game Protector Woody Portzline, District F-18, Slippery Rock.

During November, a farmer reported to me that he had heard a commotion outside his house one night. On investigating, he found that two foxes had one of his cat's treed.—Game Protector Martin L. Shaffer, District C-6, Leroy.





While attending a division meeting and picnic in August, I was called away by a farmer who said a deer had gone mad in his field. Investigation showed it to have staggered down from the mountains. The deer was leaping high into the air and then staggering again, thrashing itself one way and another until it reached the middle of the field where it bit the farmer. Then, in its weakened condition, it died. I opened it up and found small gaseous lesions every six to eight inches on the small intestine. These lesions could have been caused by the Bott's Fly. The deer was a doe nursing two fawns.—Game Protector Paul Miller, District D-18, McConnellsburg.

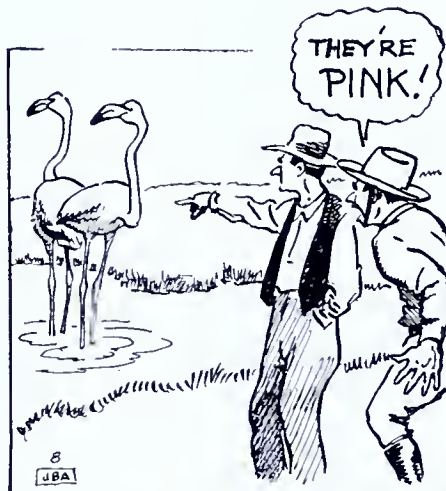
On October 13 I found a large bear cub of about 50 pounds in one of my fox traps. With the assistance of five local sportsmen, a canvas was put over the cub and the animal was released. No damage was done to the bear.—Game Protector Paul Failor, District B-19, Mt. Pocono.

About the second week in October, it appeared that the "running" season for deer got underway. Since that time, I have had ten female deer and three bucks killed on highways 209 and U. S. 6. These carcasses were nothing more than a mass of jelly where high speed trucks cut them to pieces. Three of these deer were salvaged; the rest were bear feed.—Game Protector John Lohmann, District B-20, Milford.

While posting safety zone signs on Farm Game Project No. 71, I chatted a bit with Cooperator Kassel. While standing there, we observed the neighbor's turkeys running strangely. The turkeys numbered better than 4,000 and were enclosed in a huge 59 acre pen. As we approached the pen, we noticed that a lone cock pheasant was fighting the entire flock of turkeys. The pheasant would fly into the flock and really make the feathers fly; then he would fly about 20 yards ahead. The entire flock would next take up the chase and again the pheasant would stand his ground and give battle. This procedure continued until the pheasant finally flew over the fence and landed 300 yards away to rest up a bit. Cooperator Kassel remarked that he never saw any bird or animal with more spunk than that bird.—George T. Lucas, Food and Cover Crops.

William Parrett, one of our Game Land workers, while trapping fox on Game Lands No. 28 near Hallton, succeeded in capturing a 19 pound wildcat. This was the first wildcat taken in this particular area for more than ten years and may mean that this animal, once nearly extinct, is slowly coming back. Possibly the return of the Snowshoe Hare, the cat's natural prey, has some effect on this comeback.—Game Protector Ted Carlson, District E-6, Johnsonburg.

In my district I think I have one of the champion crow shooters of the State. Mr. John Bachman of Stroudsburg took a week off from work in October and shot 493 crows. This would average about 70 a day, but it rained for about a day and a half so he couldn't shoot every day. Mr. Bachman complained about the cost of shotgun shells so someone told him to write to the President. He did. About two weeks later, he received by express one box of shot gun shells and a nice letter from the U. S. Fish and Wildlife Service, commending him on his good work. So you see the President of the United States still has time to take care of the small things.—Game Protector John Doebling, District 8-18, Stroudsburg.



Last summer we had quite an influx of egrets which are rather uncommon and these birds caused unusual reports wherever they were found. In July I had a surprise when Deputy Mumbauer took me to Dr. Ruch's Farm near Kellers Church. It was hard to believe but the man had a beautiful pink flamingo in his farm pond. The local people told me that a pair was in the area. I know that my story seems rather strange; however, I took several colored pictures of the bird and these should prove my story.

While speaking with a local ornithologist, I learned about a colony of Cliff Swallows near Elverson. I found this large colony of rather unusual birds nesting under the eaves of a large barn. The farmer told me that the first pair nested under the barn shed in 1913. At that time they attached their nests to a suspended wagon bed. Each year the birds have returned and today they number more than 100. Their nests run practically the entire length of the barn. The only other colony that I know of is located near Strinestown in York County.—Conservation Education Assistant Roy Trexler, Division "A", Reading.

The following is a story received from E. H. Hickoff, Emporium: While hunting on the farm of Pius Kutz, a Cooperator on Farm Game Project No. 17, we experienced some fine bird shooting. One of the birds that was badly crippled took refuge in the Safety Zone. With permission we entered the Safety Zone to search for the crippled bird. The dog insisted that the bird was under a stream bank; however, we thought different. In desperation we entered the stream and to our amazement we found the bird submerged in five inches of water with merely the top of his head showing. So Mr. Pheasant has a brand new trick or, perhaps, it may be an old one that has had us guessing for a long time.—Conservation Education Assistant Roy Trexler, Division "A", Reading.

While patrolling with Deputy Mawyer in the vicinity of Middle Lancaster during October, we walked into a woods owned by a Mr. Pfeffer. There must have been a squirrel migration going on as the woods were literally alive with gray and fox squirrels. They were feeding on acorns and were feeding within three feet of both of us. Deputy Mawyer put his hand up to one on a tree and reached within two feet of the animal. I was leaning on a fence between two oak trees approximately five feet apart; a grey squirrel ran up one of the oaks part way, jumped, and landed on my back; then jumped onto another oak tree. The squirrel ran down the tree and went on feeding on the acorns about three or four feet from where I was standing.—Game Protector George Miller, District F-21, Evans City.

During the month of October, I disposed of nine deer killed on the highways and had to drive 312 miles to do so. Two-thirds of these deer were so badly damaged that they were unfit for human consumption. When these deer are run over by a big truck loaded with seven or eight tons of coal, about all there is left is a bad smear.

While working the Allegheny River the first day of duck season, I saw three muskrats on a rock feeding on river clams. They would dive into the water and fish out a clam; then carry it onto the rock and eat it.—Game Protector George Burdick, District F-9, Tidioute.





BOB FORD RECORDS

VOICES IN THE WILD

By FRANK J. FLOSS

THE lives of Pennsylvania's wilderness creatures will be an open book forever if Bob Ford has his way.

After spending many years recording the habits and antics of birds, deer, snakes, foxes and frogs on motion picture film, the Pennsylvania naturalist and lecturer set out last summer to record their voices on a steel wire 1/3000-inch thick.

While searching for new species of frogs to croak into his portable microphone, Bob stopped off one August morning at my Canadohta Lake cottage in Crawford County. He had with him a stack of records he had made from his wire recordings, so the Canadohta Lake area suddenly became a bedlam of crows calling, hawks screaming, thrushes caroling, foxes squalling and frogs peeping and croaking.

I had noticed casually that we had a pair of blue jays in the woods near our cottage, but when Bob's record came to the point where the blue jays screamed, our pair of jays came rushing out of the woods and over to the cottage to find out what other jays dared intrude into their sacred domain.

Bob told me that the same situation occurs with many species, especially crows. The records should be a boon to crow hunters who take them into the woods and play them from well-concealed spots. Here, the actual voices of the crows, recorded in all their various moods, will be effective in bringing close to the hunters the wild crows of the vicinity. The hooting of a great-horned owl, as recorded on Ford's machine, should play havoc with the owl's old enemy, the crow, when the voice is amplified in a well-chosen forest.

Bob's recording of the voice of a whip-poor-will is a masterpiece. He did it so thoroughly that the fourth note, a "chuck," which most persons never hear, is part of the song. After this bird's voice was recorded on the steel wire, it was played right back to the bird. So realistic was the rendition that the whip-poor-will, a shy and secretive bird at all times, came flying into the machine to check up on the "other whip-poor-will" that apparently had invaded its territory.

One rather cool night, Ford was having difficulty recording the voices of breeding American toads. Finally he caught the one voice of one toad in a rather short rendition of its spring song. When he played the voice back to the toads, dozens of them set up a lively chorus and he succeeded in getting full-length and very satisfactory recordings.

On three different occasions, while recording crow voices, deer have appeared on the scene to see what all the fuss was about. One time in Potter County while Game Protector Bill Carpenter was imitating the cry of a goshawk in an effort to attract a wild bird near the microphone, a bear lumbered out of the woods. Bruin's curiosity was quickly satisfied for he left in a hurry when he found out where the hawk's voice was coming from.

In four different attempts to record the squalling of a red fox near its den, Ford succeeded only once. The animal was quite accommodating on this occasion, however, for Bob counted 92 consecutive squalls from the old vixen.

Technically, Bob Ford's method of recording these voices of the wild is not difficult. He uses a Webster Wire

Recorder, a commercial product which records the sounds on wire and also plays the sounds back again from the wire. If a more permanent and convenient method of keeping the sounds is desired, records can be made from the wires. If duplicate records are desired, a master record can be produced. From this, pressings may be taken, just as in the case of all phonograph records.

The difficult part of Ford's work is finding the voices in natural environment and then recording them without interference from other sounds in the same area. So sensitive is this machine that it often picks up and records background noises of which Ford is not even conscious when the machine is in operation. On one occasion, while he played for me the song of a wood thrush, I pointed out to him the distant song of an ovenbird on the same record. His recording of the deep voice of a bullfrog had the song of a tree frog in the background. The clear, sharp song of a cardinal is punctuated with the droning of an airplane (which Bob claimed was at least a mile away) and with the whistling of a distant train.

Bob's enthusiasm for his new venture was characteristic. I asked him what ambitions he cherished; what records of unusual things he hoped to achieve. His reply should appeal to sportsmen's clubs looking for the unusual.

"I have hunted mountain lions on four different occasions. I have taken movies and stills of these hunts. Now I would like to tell the story on records. The baying of the dogs, the shouts of the hunters, the cries of the treed cat . . . these are the sounds I would like to record," he declared.

And I guess there are a lot of us who will take a front row seat when Bob brings that one back!



JACOB
BATES
ABBOTT



NEARLY fifty years ago one famous pigeon roost existed on the waters of Fish Creek not far from Freeport in Springhill township. The roost was located one mile from White's mill on what is often called "Wagon Road Run". Near this same date John and William Lemons (the father of whom was one of the pioneers of this region) decided to make a visit and to spend the night at this famous rookery. They were accompanied by David and James Lemons, sons of John, and also by four young men who were neighbors—Alexander Cox, Cephas Morris, Amos and John Minor.

The party arrived at the outer edge of the roost about sundown and built their camp-fire in preparation for the night's rest. But in this they were sadly disappointed for the flocks of pigeons had already begun to arrive and as the shades of evening began to fall, those shades were rapidly increased by the vast multitudes of croaking, crying, flying birds that filled the air. All thoughts of sleep at the camp were abandoned, for, before supper was ended, a neighboring tree became so overloaded with pigeons that it turned out by the roots and fell prostrate on the earth a short distance from the camp, crushing beneath it many birds that had taken refuge among its branches.

The torches of the visitors were at once lighted and they sallied forth to gather up and bag the killed and crippled pigeons. The falling of this tree only seemed to be the harbinger of numerous others which shared the same fate, accompanied with limbs without number that same crashing to the ground, making a Bable of confusion and conflicting jargon of sound that effectually drove all "sleep from the eyes and slumber from the eyelids".

When the first streaks of morning light began to return the hunters stood ready, guns in hand, to give the birds a parting salute. But as soon as their first volley was fired, they discovered that it was a waste of time to attempt to reload. Abandoning

their firearms and seizing some poles that had been used by other hunters, they continued to knock down their unresisting game until the lower limbs were cleaned.

In the year 1815 many places in the glades near Carmichaels on Muddy creek still bore evidence of the methods employed by early settlers to entrap wolves. Pits ten to twelve feet in depth were dug in the ground and covered with rotten poles and rubbish upon which were spread a layer of leaves and moss. Over this a piece of meat was suspended from a pole. In their efforts to secure the tempting morsel the animals tumbled into the pit and once there, were completely at the mercy of their captors. Another method of which I saw traces involved the erection of two scaffolds twelve or fourteen feet high and from one-half to three-quarters of a mile apart. The wolf hunter, having thus prepared for the animals, would rub the soles of his shoes with asafoetida and tramp from one scaffold to the other. The wolves having scented this drag would speedily follow the trail and "tree" the hunter, often to their sorrow since many wolf scalps were secured by these means. One poor fellow, whose name I have forgotten, was overtaken by the hungry animals before he reached the other end of his path through the woods and was torn to pieces. Some of the forks of these scaffolds were still standing in 1820 and the bark was gnawed and the poles scarred by the teeth of the wolves.

About this time I remember of hearing James Barns, a mill-wright, tell of the wolves having pursued him in the woods, forcing him to climb a sapling. Unfortunately, he ascended a rather small one and the ravenous beasts began to gnaw the trunk. He remained until he felt the sapling begin to give, when, by great effort, he swung it against a large tree and got into it. Seeing he was safe, the wolves raised a howl and plunged into the depths of the forest, leaving him to descend and to make his way home in safety.

PIGEON ROOST

By Colonel Henry W. Shoemaker



IT SHOULDN'T HAPPEN AGAIN

By ED SHEARER

THE CURTAIN has fallen on the 1949 hunting season and 1950 is ahead of us. All who took to the fields and forests have undoubtedly had great moments along with bitter disappointments. It has always been that way among hunters and I guess it always will.

If a sportsman had a fair amount of hunting this season, he probably experienced at least one moment that thrilled him and lifted his spirit to celestial heights. That moment is etched in his memory and will be recounted around many a future campfire—sorta like the Indian counting his coups.

But the disappointments, the failures—what about them? It's only human to bury them deep and to erase them from our memory as swiftly and painlessly as possible. The aplomb of the average hunter in translating his big moments into accounts of his great personal skill and his failures into manifestations of a malign and unseen power is a most amazing revelation.

Take, for example, the end of a birdless day when I walked in on a point, tripped on an unseen root, and missed the only grouse in the county. Bad luck I called it. My shooting pal consoled me thusly:

"If you'd a had the brains of a rabbit, you'd a stood still or pulled your hatrack outa the clouds an' looked where yu' was goin' an' killed that bird." I still say it was bad luck. Yes, sir, that's my story and I'll stick to it. In fact, looking over my hunting notebook I see I've had an unbelievable amount of bad luck.

Be that as it may, if I were judging performance, say my shooting pals, I would be more cautious in using the word "luck." In fact I would state that, on the average, luck plays a more important part in our big moments than it does in our failures. It may be hard on our ego, but if we want more big moments, it will pay to analyze our bad luck and that of others.

So let's look back over the season and take a glance at some bad luck while it's still fresh in our memories. If some are repetitions of oft repeated cautions, it's because they have happened again this season. There are several things I observed or investigated which I'll write about this month.

First, another Damascus barrel gave up the ghost early in the season. This time with a Remington express load. Barrel let go ahead of the forearm. Fortunately, the only casualties were the gun and the shooter's half-baked theories. Said theories consisted of firing the gun with a string tied to the trigger. Nothing happened so the gun experts were talking through their hats. This guy must have been a blood relative of old Ned Shaffer. He was a nice fellow whose specialty was beating trains to the crossing. The night express wafted him off to his ancestors, too.

Another man was hunting rabbits. Along about noon he called the dogs in and sat down to eat lunch. He put his gun on safe and leaned it against a tree. One of the dogs knocked the gun

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A POINTING LESSON

By HERBERT KENDRICK

THE CROWNING climax of a training job well done comes at the time the young gun dog successfully finds his game, handles it in a satisfactory manner, and stretches out into one of those beautiful points he was born and reared to make. At a tender age he exhibits his instinct to point every living thing that attracts his attention, yet he cannot resist the desire to chase as long as his little legs can carry him. At this point the trainer comes to his rescue and teaches him how best to benefit his master and at the same time satisfy his own desires. One of the greatest thrills of gunning is the sight of a cleanly killed bird falling ahead of a young dog and seeing him learn that the gunner plays a great part in the game he loves so well. The young prospect learns so rapidly when his teacher gives him a *reason*.

Characteristics of the individual dog should govern the proper age to begin the serious training of pointing. If the youngster possesses freedom of range and speed, uses his nose, and shows some knowledge of game bird habits, then he is ready to stop his flushing and chasing and settle down to staunch pointing. The timid, slow, cautious dog should be encouraged to hunt and find, and teaching to point should be delayed until those results are achieved. It takes great patience and rare good judgment to end up with a good hunting dog.

The simple method of teaching a dog to point is to take him into birdy cover with an older thoroughly trained brace mate, and hold the young dog on a lead until the other dog finds game. With the experienced dog staunchly on point, lead the youngster up until he smells the birds himself. The dog possesses some pointing instincts and he will naturally stiffen. Place him gently in a correct position, head high, tail high, and if he has a tendency to crouch lift his body up until he stands upright of his own accord. When he is definitely pointing it is an excellent idea to apply easy pressure from behind, gently pushing him toward the game. His tendency will be to resist this pressure to keep from flushing. He will not like to make a flush artificially even though he would dash in and chase of his own volition. It sounds crazy; however, it is true. It is essential, in getting a dog to point dependably, to get your hands on him, enabling him to understand he is expected to point steady, stylish, and as long as you desire him to point. Continue this training until you are sure the dog will perform on his own, then try him out alone. It may be a safe measure to let the dog drag a long lead, and when he finds game, he may point long enough for you to reach the end of the lead. Then proceed with the training. Do not use a lead on a close ranging dog as it may tend to slow him too much.

If your pupil should flush his birds get him back to the spot as soon as possible and place him in a pointing position, steadying him with the hands and encouraging him gently, let him understand that he should have stayed as he is now.

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OUTDOOR KIDS

By
Hal Harrison



IT WAS a Saturday morning in early February. Snow had started to fall at noon the day before, and had continued until sometime during the night.

As Billy and Jane left the house that morning, they entered a world completely white. When they reached the edge of town and the noise of busy people was left behind, they seemed to be approaching a land where there was no life, no activity; a land where everything was quiet and still.

Billy and Jane knew better. They knew that while nothing moved in the woods and field ahead of them, that life was everywhere, hidden from their eyes.

But on a morning like this, the outdoor creatures could not hide their movements of the night before when Billy and Jane were asleep. Their goings and comings were written in the snow where their tracks left a story for the children to read.

"Isn't this a rabbit track over here?" Jane called to Billy.

"Sure thing," Billy answered as he approached from the side.

"Well, Billy, how come a rabbit has bigger front feet than back feet?" Jane asked in a very puzzled tone.

"It doesn't," came Billy's quick answer, "the tracks that you see in front are the hind feet. They are side by side and were made as the rabbit bounded ahead. The two behind are front feet. It sounds silly, Jane, but it's the hind footprints that tell you the way the rabbit was going."

"Well, do other animals that gallop along like rabbits leave the same kind of tracks?" Jane asked.

"I guess any animal leaves a track something like that when it gallops, but all animals don't gallop all of the time like a hopping rabbit. I hope we can find a squirrel track today. It bounds like a rabbit, but the drawings in our "Animal Tracks" book show both front and back feet in pairs."

As the children went deeper into the woods, they had the thrill of having a ruffed grouse "explode" from its

burrow in the snow right in front of them. It frightened them at first, and the grouse was off through the trees and out of sight before they realized what had happened.

"You know, Billy, that grouse must have just dug itself into this hole last night and allowed the snow to cover it," Jane observed as she knelt beside the broken "form" in a snowbank.

"That's what it does all right, but sometimes it dies in there," her brother added.

"You mean it can't breathe?" Jane asked incredibly.

"No, it just gets trapped sometimes. Pop says that when the grouse is buried like that and a freezing rain puts a hard crust over the burrow, the bird can't break through and just starves and freezes."

Deer tracks were a source of delight to the children. They found tracks where two deer had walked side by side; the one track about two and a half inches long and the other about an inch shorter. They decided that a doe and her fawn had passed that way.



Berwick Sportsmen

The West End Hunting & Fishing Club of Berwick recently concluded an outstanding year of activity and accomplishment. At their annual election of officers, Wilbur Stephens, Bloomsburg, was chosen to lead the group and other officers elected included Vice President, Frank Litzel, Berwick; Secretary Albert Algatt, Berwick; and Treasurer, Roland Davis, Berwick. The program outlined for the first part of 1950 will include trout stocking in various streams near Berwick and purchase of rabbits for release on nearby farms. The club again plans a prize fish contest and will make every effort to carry out a policy of doubling the membership each year. The Club has adopted a new badge for the coming year which features a deer silhouetted against a background key-stone and plans to inaugurate a policy shortly of inviting all farmers in the vicinity to attend their meetings in an effort to work out better farmer-sportsmen relationships.

Carrick Junior Conservationists

Typical of the achievements possible in a junior conservation club are the activities of the Carrick Junior Conservationists, a group of 38 boys between 9 and 15 years old who live in Carrick, near Pittsburgh. This junior club planted 100 pine seedlings on a hillside in their neighborhood last fall and also have planted many walnuts, acorns, and hickory nuts. They plan a spring shrub planting for wildlife. Their program includes a bird house building project and a winter bird feeding schedule. The group is headed by President Eugene Reinbold.

All Sportsmen's Trap League

In the spring of 1947 men from six clubs in the Pittsburgh area gathered together to form the All Sportsmen's Trap League. The league was formed for the novice shooter who had not had any experience in the semi-pro trap leagues then in existence. The new League was aimed at bringing these shooters together for a better understanding of the problems of sportsmen, rather than professional shooters. The Wilkesburg Sportsmen, Western Pennsylvania Sportsmen, Murrysville District Sportsmen, Crowfoot Rod &

Gun Club, Rosedale Sportsmen, and Oakland Rod and Gun Club all entered teams to compete in the league. A schedule was set up for the summer which featured league shoots every Monday evening. Twenty-five birds were shot by each contestant and a club could enter as many individual shooters as they desired with the five highest scores making up the team total for the match. A small entry fee was charged for each shoot, proceeds from which are used for prizes under a Lewis Class shoot at the end of each season. Original officers who guided

the league through its early days and did much to assure its success included President J. Quentin Reed, Vice President J. H. Maxwell, Statistical Officer T. E. Henshaw, Treasurer W. H. Walker, Secretary Bill Camp, Safety Committees Chairman Charles Soxman, and Rules Committee Chairman G. H. Smith.

At the end of the 1949 season \$200 was awarded in prize money, including the award of the W. S. Brown trophy to the first team, a J. Q. Reed Trophy to the high gun, a Duquesne Trophy to the high handicap shooter, and the Wesley M. Hale trophy to the high 5-man team. Meetings are held once a month and each member club sends two delegates to these meetings. Working together, member clubs have made many improvements in their grounds and equipment. The Rosedale Sportsmen relocated both of their traps and built new trap houses as well as illuminated one trap for night shooting. The Western Pennsylvania Sportsmen bought a new piece of property installed two new traps, concreted their runways, and are planning on installing lights as well as a new trap and field. Each club claims the formation of this league has helped to make a profit, plan new improvements, and better understanding between clubs and club members. In the three years of operation, there has never been an accident of any kind, and the League plans an even greater program in 1950. Anyone with questions on League organization or the formation of similar Leagues throughout the State is urged to write Secretary Bill Camp, 428 S. Atlantic Avenue, Pittsburgh 24.



Winners and committee of a recently concluded youth contest conducted by the Delaware County Field & Stream Association are, left to right, standing, Rear row: Robert Yake (Committee), Manfred Haiges, Estley Simmons, James Smith, Jim Goodyear; Middle row: Edward Reading, John Turner, John Tomlinson, and Roger Ruth; Front row: Lawrence Frances, George Grosser, Jr., and Bill Tomlinson; Sitting: Elwood Casey (Committee), Ed Cape, and Shorty Manning (Chairman).



National Wildlife Federation Announces 13th Annual Wildlife Week Plans

America's 13th annual National Wildlife Restoration Week, originally established by Presidential proclamation in 1938, will be observed this year during the week of March 19-25, under the sponsorship of the National Wildlife Federation.

Wildlife Week aims to focus the attention of 150 million Americans upon the importance of wildlife conservation to their everyday life and the debt which they owe coming generations to help perpetuate our natural resources for future welfare and prosperity.

State, county and local group meetings throughout the Nation will direct public discussions of wildlife conservation through prudent management of America's natural resources, including water, soil, trees and all other plant as well as animal life. Conservation-minded and public-spirited organizations participating will include sportsmen's associations, garden and nature clubs, and other adult and school groups.

Calling all lovers of the outdoors to take part in a nation-wide conservation program, the National Wildlife Federation urges co-operation with State Conservation Officials, as emergencies may arise, in winter feeding of snowbound birds and animals to prevent suffering and losses through starvation.

Ever since Wildlife Week was inaugurated by the Federation and recognized by proclamation of the late President Franklin D. Roosevelt in 1938, the Federation has carried on a year-round conservation education program. The Federation Business office issues annually a series of Wildlife Conservation Stamps, with descriptive albums for preserving them.

The distribution of these stamps during Wildlife Week and other times is a part of the education program of the Federation. Proceeds from their sale are the organization's main source of income to carry on its wildlife programs. The 1950 series in natural colors includes 36 animal, bird and plant subjects from the brush of Walter Weber of Vienna, Va., famed wildlife artist and former art consultant to the Federation.

New Commissioner Appointed



Joseph P. Willson

Governor James H. Duff announced the appointment on December 29 of Joseph Putnam Willson, 706 King Street, Smethport, McKean County, as a Member of the Pennsylvania Game Commission. Mr. Willson replaces the late Dr. H. E. Kilgus, Brockway.

Commissioner Willson is a practicing attorney at Smethport and is a member of the McKean County Bar Association and the Pennsylvania State Bar Association. Son of an Episcopalian minister, he was raised in Crosby, Norwich Township, McKean County and graduated from the University of Pennsylvania in 1926. He was captain of the Penn Football Team in 1925. Mr. Willson is also a graduate of the Temple Law School, Class of 1931. He commenced practice of law in Smethport in 1932 and, except during the war years, has continued his general practice. He joined the Navy in 1942 as a Lieutenant and was discharged in October, 1945 with the rank of Lieutenant Commander.

Mr. Willson is prominent and active in sportsmen's circles in McKean County. He is a past president of the McKean County Federation of Sportsmen and is now president of the Keating Sportsmen's Association. He is a Past Commander of the American Legion at Smethport. The new Commissioner is married and has two daughters.

Pennsylvania Ranks Second in Hunting License Sales

Hunting license sales for the fiscal year ending June 30, 1949, rang up new record-breaking totals both in the number sold and in revenue received according to the results of a survey recently released by the U. S. Fish and Wildlife Service. Compared with the preceding year, license sales increased 1,366,888 to a new total of 12,758,698 licenses. Revenues received from these sales also were up \$5,152,360 to a new high of \$34,966,687.

In the "big ten" in license sales Pennsylvania ranked second with a reported issue of 878,669 licenses, yielding the top spot it held a year ago to Michigan. Other leading states in license sales were New York, Ohio, Minnesota, California, Illinois, Wisconsin, Indiana, and Washington. In "revenue received", the first ten states were as follows: Michigan, Pennsylvania, Colorado, Washington, California, New York, Oregon, Missouri, Wisconsin, and Ohio. The sale of Federal migratory bird hunting stamp, commonly called "duck stamps," also broke all records in 1948-49 when 2,127,598 of these stamps—the last of the \$1.00 issue—were purchased.

Tips For Beaver Trappers

If you plan a trap-line for the valuable "broad-tail" during the open season, February 15 to March 1, know and abide by these important rules and regulations designed to conserve and perpetuate Pennsylvania's beaver supply:

Season and daily bag limit is 2 beavers, to be taken by traps only. There is no open season this year in the following counties: Allegheny, Beaver, Fayette, Greene, Indiana, Somerset, Washington, and Westmoreland. No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline of the structure of either. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to the Game Protector in the District or County where trapped.

Next Month's



Game News

BILL WOLF—Is it really true that rain is due soon after a mourning dove's call is heard? Is it true that snakes can milk cows? How smart is a crow? Here in an easy-to-read feature article, a nationally known author gets down to facts and fallacies about the outdoors, exploding some of our common beliefs and digging up new ones for us.

HOWARD WIGHT—Proving that wildlife research can give some practical answers to wildlife management, this research worker reviews some valuable findings on his pheasant project in Lehigh County. Son of a well-known conservationist, the author terms nesting loss as a serious pheasant bottleneck. Farmers and sportsmen will have much less trouble figuring out why there isn't a ringneck under every bush after reading this March feature.

LEO LUTTRINGER—The Chief of the Commission's Conservation Education Division has had some highly interesting experiences with hibernating bears but none can compare with "Big Bertha," the biggest bruin of them all. And with four cubs clowning in the wild before your eyes, here's a story that will interest young and old alike.

DICK WILLIAMSON—Men who direct the affairs of the Consolidated Sportsmen of Lycoming have solved the problem of keeping 10,000 members busy and happy. They have done it with a program—a program that provides for the whole family of every one of its members. Here is the story of a Pennsylvania sportsmen's organization that is attracting nation-wide interest.

PYMATUNING RUMOR

The 3600 acre Pymatuning area in Crawford County, on which the Commonwealth's waterfowl sanctuary and museum are located, has become renowned nationally.

Recently, a rumor to the effect that the Pennsylvania Game Commission is planning to abandon the refuge and museum was officially spiked by a representative of the game body. He stated that "the Commission would entertain no such silly proposition or foster such a backward step."

DON'T FORGET GRIT

Feeding stations for song and game birds often lack the highly important item of GRIT. For song birds, a sheltered, adjacent supply of baby-chick grit and for game birds a slightly larger size grit, should be available at all times. A bird can starve if its grit supply is covered for a long time with snow and ice.—Charles P. Mills, Huntingdon Valley.

New Deer Repellent Announced

Extensive research conducted in Maine on two deer repellents indicate that farmers and orchardists may soon be able to fully protect their crops from extensive deer damage. According to Mr. Stephen D. Powell of the Inland Fisheries and Game Department, Augusta, Maine, deer repellents recently developed by the B. F. Goodrich Chemical Company of Cleveland, Ohio, promise more effective relief from deer depredations on agricultural crops than have been possible through use of previous protection measures. Mr. Powell described his findings from a Pittman-Robertson financed research project in a paper he presented at the recent North American Wildlife Conference in Washington.

The two new products are known as Goodrite z.a.c. combined with Goodrite p.e.p.s., an adhesive. In the spring of 1948 the practical application of this compound was carried out in Maine in various areas in which deterrents such as stock dip, string, anise, bloodmeal, etc. had been used previously without worthwhile results.

Rows of beans were sprayed with a 5% dispersion of Goodrite z.a.c. using a .05% solution of Goodrite p.e.p.s. as a sticker. The

repellent was applied by using a hand-operated, compressed air type sprayer. The solvent was water. The repellent has been used with almost 100% success in preventing deer damage on beans, strawberries, cabbage, cucumber vines, beet and carrot tops, squash, and raspberries. It has also been used with wide success in spraying apple trees. No damage has yet resulted to any plants thus sprayed.

In addition to its deer deterrent action, the material has shown promise of control of blights of potatoes, tomatoes, various mildews, apple scab and various rust diseases. Rotenone or other insect repellent material may be added to the spray and thus one application may be applied.

Extreme care must be taken to clean the sprayer thoroughly after each use in order to prevent clogging by the adhesive. The pump should be flushed out several times with clear water at the end of each spraying day. The crops should be sprayed before any deer have browsed the area and further spraying should be spaced so as to keep in step with the growth of the plants where heavy deer damage is expected; otherwise one application is often sufficient.



A. G. Rogers Photo

A row of beans at the left treated with this new deer repellent shows no signs of deer browsing while the untreated row at the right has been heavily browsed. Both rows are the same age.

Requirements and Qualifications for Admission to the Ross Leffler School of Conservation

WITH the inauguration of the permanent Game Commission Conservation School in 1936, reputed to be the first institution of its kind in the United States and possibly in the world, all other methods of selected salaried field personnel of the Pennsylvania Game Commission were abolished. Since that time all permanent appointments to the Commission's field force have been made from graduates of the school located near Brockway, Jefferson County.

Since the graduation of the Sixth Student Training Class last June, vacancies in the field force created a need for the enrollment of another class. The Commission at its meeting in October authorized this action and has invited any male citizen who has been a bona fide resident of the Commonwealth for a period of three years preceding the closing date for enrollment and who can meet the age, physical and other qualifications to make application.

Those qualifying in a preliminary manner will be advised of their eligibility to take a competitive written examination to be given at Harrisburg covering the following subjects: Pennsylvania Geography, Pennsylvania History and Civics, Mathematics, English, Natural History, Spelling, and the Game, Fish and Forest Laws of Pennsylvania. Oral interviews will also be included. The student class will be chosen from those with the highest average standing, on a statewide basis, but not more than 25 members have been authorized for the Sixth Class.

All applicants selected from the written and oral examinations will be given a rigid physical examination by a registered physician appointed by the Commission, and will also be subject to a moral and character investigation before final selection. The Commission reserves the right to reject any applicant, without notice of reason for such rejection.

Students selected for training will be "enlisted" for the duration of the course of instruction, commissioned as Deputy Game Protectors, and receive specialized training at the Commission's Conservation School situated seven miles northwest of Brockway. The entire training period will continue approximately one year. Specialized and technical training at the School will include the history of the Game Commission, its organization, objectives and administrative functions. The physical and industrial geography of the State and its inhabitants will be taught and a generalized course in natural history will be given. Other courses in general office procedure, public speaking, public relations, legal procedure, law enforcement, game management, land management, game propagation, self-defense methods, firearms, and physical training are also included in the curriculum.

Specialized training will be intermittent with practical field work at seasonable periods of the year and student officers will be assigned to field duties in various sections



Main Hall containing dormitory, offices, mess hall, recreation room, and class rooms at the Ross Leffler School of Conservation.

of the state for practical application of the principles taught at the school.

Students who successfully complete the entire course of the school and field training will be assigned to duty on a salaried basis during a one-year probationary period from the date of graduation. Having rendered satisfactory service during this probationary period, they will then be eligible for appointment in the Enrolled Field Service on a regular salaried basis and will be assigned to fill existing vacancies in the field service without regard to the district from which they were recruited.

A brief outline of the general qualifications and regulations follows:

Residence Requirements

Each applicant shall have been a bona fide resident of the Commonwealth for a period of not less than three years preceding the closing date for application. To qualify as a resident any applicant who was absent from the State because of military service, college attendance, etc., and who has not transferred his residence to another State will be considered a resident of Pennsylvania.

Age Requirements

All applicants shall have passed their twenty-third (23rd) birthday on or before January 1, 1950 and shall not have passed their thirty-fifth (35th) birthday prior to that date.

Previous Experience Required

Each applicant shall be required to submit satisfactory proof that he has had a minimum of five (5) years of practical experience in hunting or trapping or has completed a minimum of recognized courses of study of two

(2) years in forestry or wildlife management (or the two combined) in an educational institution, plus two (2) or more years of practical experience in hunting or trapping.

Height Requirements

The minimum shall be five feet, eight inches (5' 8") taken in stocking feet, the maximum to be in relative body proportions.

Weight Requirements

The minimum weight shall be one hundred forty (140) pounds stripped of all clothing. The maximum shall be two hundred (200) pounds stripped of all clothing up to six feet (6') in height, but an additional allowance of ten (10) pounds will be made if the applicant is more than six feet in height.

Physical Qualifications

Each applicant shall be subject to a rigid physical examination and shall be free from all physical defects including the shortage or loss of a member of the body. A preliminary physical examination conducted by a registered physician of this State shall be made a part of the application, the cost of which shall be borne by the applicant. The final physical examination will be made by a registered physician appointed by the Commission, the cost of which shall be borne by the Commission.

Vision Requirements

Before any applicant will be admitted to the School, he must be able to pass a 20/30 vision and color test without glasses.

(Continued on Next Page)

Examination Credits

Any Deputy Game Protector who has had continuous satisfactory service with the Commission in general enforcement or land management work will receive credit in the written examination for a number of points depending on the number of full year's service prior to January 1, 1950.

Rates of Compensation

Students, including veterans, selected for training at the School will be paid at the following rates during the entire training period: Single Man—\$75 per month; Married Man, living with his spouse—\$90 per month; Married Man, living with his spouse, with one dependent child under 18 years of age—\$100 per month; Married Man, living with his spouse, with two or more dependent children under 18 years of age—\$110 per month. However, any full-time Acting District Game Protector who has had 18 months or more of service prior to January 1, 1950, or any Deputy Game Protector having 3 or more years of satisfactory service with the Commission prior to January 1, 1950, will be paid at the following rates during the entire school training period: Single Man—\$75 per month; Married Man, living with his spouse—\$120 per month; Married Man, living with his spouse, with one dependent child under 18 years of age—\$130 per month; Married Man, living with his spouse, with two or more dependent children under 18 years of age—\$140 per month. In addition students will receive maintenance and subsistence during the time they are receiving specialized training at the school and necessary traveling expenses during the time they are engaged in field work.

The Conservation School has been certified as an approved training institution for World War II veterans. Such persons in addition to the above rates of compensation are entitled to allowances under the G.I. Bill of Rights for educational or training purposes in the same manner as they would be in any other approved training program.

Leaves of Absences

Student officers will be granted reasonable leaves of absence over weekends during the school term and field service. No other leaves will be granted except those of an emergency nature. All leaves of absence shall be at the personal expense of the student.

Assignment to Duty

It is contrary to Commission policy to assign graduate officers to their home district. Applicants must signify their willingness to accept assignments to duty during the training, probationary period and regular duty at such geographical locations as the Commission or its agents shall select without regard to the location from which the student was recruited. Game Protectors are paid a minimum salary of \$2820 per annum and through annual increments for meritorious service may be increased to a maximum of \$4176 per annum over a period of at least eleven years. Game Propagators are paid a minimum salary of \$2820 per annum and through annual increments may be increased



BIRD DOGS—Ray T. Holland, A. S. Barnes & Co., Inc., 67 West 44th St., New York 18. Price \$5.00.

Many dog handlers and sportsmen have been looking for a single book that will tell them the things that should be known about the various breeds of working dogs. Their search can end with this recent addition to the Barnes "Sportsman's Library." In this volume are separate chapters on every kind of bird dog along with fascinating accounts on the origin, description, and standard of points of the different strains. Those sections dealing with yard and field training, field trials, scent and reasoning power, and care of dogs, are interesting and enlightening. The splendid illustrations will be cherished by bird dog lovers and will be enjoyed by the youngsters.

FUR FARMING FOR PROFIT—Frank G. Ashbrook. Orange Judd Publishing Co., Inc., 15 East 26th St., New York 10. Price \$4.00.

Here is a practical and exceedingly useful guidebook on fur animal production. It is an authoritative reference, not only for the amateur and experienced fur animal breeder, but for all those interested in native wild animals. The book covers the essentials of breeding, feeding, management, and the prevention and treatment of diseases. All of the furbearers being raised in captivity are dealt with in a well-organized manner. Instructions on such mammals as the beaver, chinchilla, fisher, fox, marten, mink, muskrat, nutria, otter, opossum, raccoon, and skunk will help the beginner and the expert to avoid the pitfalls encountered in propagation, transporting live animals, pelting, and in marketing of furs.

to a maximum of \$3516 per annum over a period of at least eight years.

How to Apply

No applications will be considered except those submitted on the official form provided for the purpose which must contain complete information sworn or affirmed before a proper public official. If any application is returned for verification, correction

FIELDBOOK OF NATURAL HISTORY—E. Lawrence Palmer. McGraw-Hill Book Co., Inc., New York, N. Y. Price \$7.00.

Here, between two covers, is undoubtedly the most amazing work of its kind ever published, a complete one-volume library on natural history whose scope ranges from cosmic dust through man. More than 2,000 subjects, mineral, plant, and animal, are covered separately and each individual species listed is shown in a clear drawing which will facilitate identification of specimens. This book will prove a valuable reference for writers, nature students, sportsmen, and students. This is a work which, to be fully appreciated, must be seen.

BIRD DOGS—Ray T. Holland. A. S. Barnes and Company, 67 West 44th Street, New York 18. Price \$5.00.

Three distinct qualities characterize this book: eloquence and simplicity of writing, completeness, and superb publishing. Many dog handlers and fanciers have been looking for a single book that will tell them the things that should be known about the various breeds of working dogs and their search can end with this recent addition to the Barnes' "Sportsman's Library." In this volume are separate chapters on every kind of bird dog, including odd breeds. Those sections dealing with yard and field training, field trials, scent and reasoning power, and care of dogs, are interesting and enlightening.

or additional information, the corrected application must be resubmitted within the date and hour set. Applications can be secured only by addressing a written request to "Chief," Ross Leffler School of Conservation, Pennsylvania Game Commission, Box 116, Brockway, Pennsylvania.

Applications, in order to be considered for the next student class must bear a cancelled postmark not later than midnight, February 15, 1949.

Power Lines Could Provide Nationwide Habitat Network

Millions of miles of power and telephone lines, forming a network across America, could be developed into excellent wildlife habitat with mutual benefits to game, sportsmen, and the utility corporations, the Wildlife Management Institute believes.

The task of keeping lines clear of brush is an arduous one for these firms. Formerly large maintenance crews were needed to patrol lines and cut back the growth that flourishes in these clearings. With the development of weed-killing chemicals, like 2-4D, the problem is simpler, but cumulatively, the control of weeds still is a stupendous task requiring the annual investment of huge sums of money. A bare area, whether cleared with fire and brush hook or chemical agents, creates an ideal seed bed for new growth of the same species of trees and brush that have been removed. A few years later the operation must be repeated.

Farmers in soil conservation districts across the nation have been using *Sericea lespedeza* to prevent the encroachment of brush into croplands. The utility companies could use the same plant to excellent advantage wherever this shrub is adaptable. Other plants could be suggested to the corporations by botanists for use in northern states where the range of *lespedeza* has not been extended. By this method the power and telephone companies would, in one seeding operation, establish a permanent low cover in their lines that would thwart the invasion of brush. Such an operation would represent an investment only slightly greater than that required for the maintenance of the lines for a year or two.

The effects of such a practice on wildlife populations would be tremendous. While *sericea* has little food value for game, it provides excellent cover for quail, pheasants, rabbits, and other wildlife. Bicolor would be a better choice from the standpoint of the game, but the planting of this species is more difficult than *sericea*. The latter may be sown speedily and inexpensively with a Horn or Cyclone seeder.

Who's Seen A Snowy?

Early reports from various sections of the State indicate that Pennsylvania is due for another large migration of Snowy Owls from their native haunts in Canada. Up to the end of December Game Protector Bruce Yeager had reported a known influx of 15 of these picturesque birds in Montour County alone.

The Pennsylvania Game Commission and national organizations interested in wild birds are interested in receiving reports from anyone who observes these owls. If you are fortunate in seeing one of these rare visitors of Pennsylvania, please write to Mr. Robert D. McDowell, Chief, Division of Wildlife Research, Pennsylvania Game Commission, Harrisburg, giving the date the bird or birds were observed, the place (county and township if possible), and a note as to whether the bird or birds were observed or shot.

SUMMARY STATEMENT OF BOUNTIES PAID ON PREDATORS DURING FISCAL YEAR, JUNE 1, 1948-MAY 31, 1949

Counties	Weasels	Gray Foxes	Red Foxes	Goshawks	Great-Horned Owls	Amount
Adams	174	116	108	1	8	\$ 1,104.00
Allegheny	145	294	192	..	15*(1)	2,147.00
Armstrong	314	412	172	..	12*(2)	2,694.00
Beaver	41	226	220	..	10	1,865.00
Bedford	233	179	318	1	38*(1)	2,373.00
Berks	576	504	178	..	15	3,364.00
Blair	125	155	157	..	6	1,397.00
Bradford	1,433	573	1,202	..	189	9,289.00
Bucks	231	343	140	..	7*(1)	2,189.00
Butler	458	328	191	..	29*(2)	2,646.00
Cambria	617	137	115	..	16*(1)	1,687.00
Cameron	3	110	109	..	5	899.00
Carbon	222	152	43	..	12*(3)	1,044.00
Centre	357	385	410	..	47	3,725.00
Chester	118	.....	.....	..	1	122.00
Clarion	388	368	288	..	34	3,148.00
Clearfield	432	386	269	1	15*(1)	3,112.00
Clinton	59	380	199	1	8	2,409.00
Columbia	534	281	61	1	46*(1)	2,086.00
Crawford	371	124	368	..	79*(1)	2,653.00
Cumberland	176	97	258	..	12	1,644.00
Dauphin	382	190	100	..	33*(5)	1,664.00
Delaware	7	.....	.....	..	.....	7.00
Elk	165	234	281	3	9	2,267.00
Erle	349	73	430	..	62*(13)	2,583.00
Fayette	347	396	398	..	2	3,531.00
Forest	66	108	171	..	33	1,314.00
Franklin	164	184	257	..	3	1,940.00
Fulton	72	156	124	..	24	1,288.00
Greene	61	427	589	..	50*(6)	4,313.00
Huntingdon	149	331	347	1	21	2,947.00
Indiana	477	545	85	..	56*(5)	3,211.00
Jefferson	448	333	218	1	58*(4)	2,878.00
Juniata	112	116	143	1	21	1,234.00
Lackawanna	296	181	125	..	19	1,596.00
Lancaster	389	663	105	1	21	3,547.00
Lawrence	70	103	70	..	8*(2)	790.00
Lebanon	87	102	32	1	5	645.00
Lehigh	174	204	78	1	8	1,336.00
Luzerne	2,005	553	167	..	59*(4)	5,113.00
Lycoming	267	504	358	1	88	4,069.00
McKean	228	265	553	1	44*(3)	3,672.00
Mercer	332	176	157	..	40*(4)	1,816.00
Mifflin	129	127	172	..	9	1,361.00
Monroe	189	392	223	2	11	2,697.00
Montgomery	135	244	43	..	9	1,319.00
Montour	99	45	13	..	21	415.00
Northampton	101	128	52	..	1	825.00
Northumberland	421	126	54	..	25	1,241.00
Perry	197	136	251	..	17	1,813.00
Philadelphia	.....	10	.....	..	.....	40.00
Pike	55	435	172	..	13	2,535.00
Potter	84	241	1,138	1	33	5,734.00
Schuylkill	930	366	98	2	32*(4)	2,910.00
Snyder	233	44	141	1	16	1,039.00
Somerset	847	254	394	..	16	3,503.00
Sullivan	317	144	151	..	9	1,533.00
Susquehanna	365	361	718	..	53	4,893.00
Tioga	285	353	1,539	..	123*(1)	8,343.00
Union	134	60	77	..	14	738.00
Venango	290	333	242	..	28	2,702.00
Warren	158	133	452	1	49*(3)	2,690.00
Washington	86	476	598	..	18	4,454.00
Wayne	242	708	582	..	24	5,498.00
Westmoreland	633	547	147	..	13	3,461.00
Wyoming	308	228	199	..	21	2,100.00
York	371	485	319	..	13	3,639.00

Total	20,263	17,770	17,561	23	1,836*	\$168,841.00
Number of Claims—19,650					* 68 fledglings @ \$2.00	
Total previous fiscal year	18,807	16,951	16,606	22	1,429	\$158,697.00
Number of Claims—19,715						



Millions of miles of power and telephone lines, such as these, could be developed into excellent wildlife habitat.

UNDER THE HEMLOCKS—

from Page 3

The day before the snowfall Dwight had set a string of traps at what he thought were strategic points along a little spring run guttering its way across the hillside overlooking the swamp. The most likely of the dozen or so sets chanced to be the one baited with the red squirrel, the freshly killed bait being supplemented by just the right touch of the proper scent, in this case an evil smelling concoction consisting largely of fish oil and other equally odoriferous ingredients.

Shortly after the snow had quit falling the pangs of hunger caused the mink to bestir himself from out of his snug retreat under a gnarled beech root to begin the arduous task of rustling food. He had slept through the storm and thus missed his regular nocturnal foray. Dawn was just breaking when the animal poked his triangular face through the thick snow blanket.

After a cursory glance at the strange new world still glittering under the bright moonlight, the animal with its characteristically bounding lope made for the nearest hemlock covert. While pausing in the shadow of a huge bole he caught a faint but enticing whiff of the scent emanating from the red squirrel set. He followed the aerial trail to its destination.

As unerringly as a pointer dog making game the mink loped up to the set, both the musty shrew smell and that of the mutilated squirrel lost in the cloying one of the heady scent. Without pause the animal began burrowing into the snow for the elusive odor. Almost instantly it encountered the squirrel carcass and a second later the jaws of the hidden trap would have closed onto a front leg had it not been for the shrew.

As one of the mink's forefeet scraped the shrew's back the little creature was at once aroused and scurried from the spot. The mink detecting the slight movement made the snow fly in an attempt to garner some what may. At the end of the second bound the snow exploded in the mink's face and a grouse rocketed off into the gloom of the hemlocks. As the mink stopped in baffled amazement two more birds thundered off in a flurry of snow.

The frantic animal snarled and began bounding wildly about hoping to flush more of the resourceful birds. Grouse, it may be added, are wont to take refuge in deep, new snow, the birds plunging headlong into a drift while in full flight so as not to leave any telltale tracks for predators to follow. All too frequently a freeze follows a thaw and the snug retreats become so many tombs since the birds often find it impossible to break through the icy glaze which forms on the snow.

The sorely confounded mink finally gave up his quest and hied off to a stream where he knew the finny prey to be not as elusive as the winged thunderbolts of the hemlock aisles.

Old time residents claim that in Forest county the wildcat or bobcat passed out of the picture with the decrease in grouse and varying hare populations. Twenty and even as recently as a dozen years ago both of these popular game species were uncommonly plentiful. It was not rare to flush two or three score birds in the course of a morning's hunt while it seemed that a big hare jumped out from behind every suitable piece of cover. These with the abundance of squirrels and lesser rodents furnished a bountiful food supply for the cats which occurred in every part of the county.

Jeb Fox from out Marienville way declared that one of the varmints had done

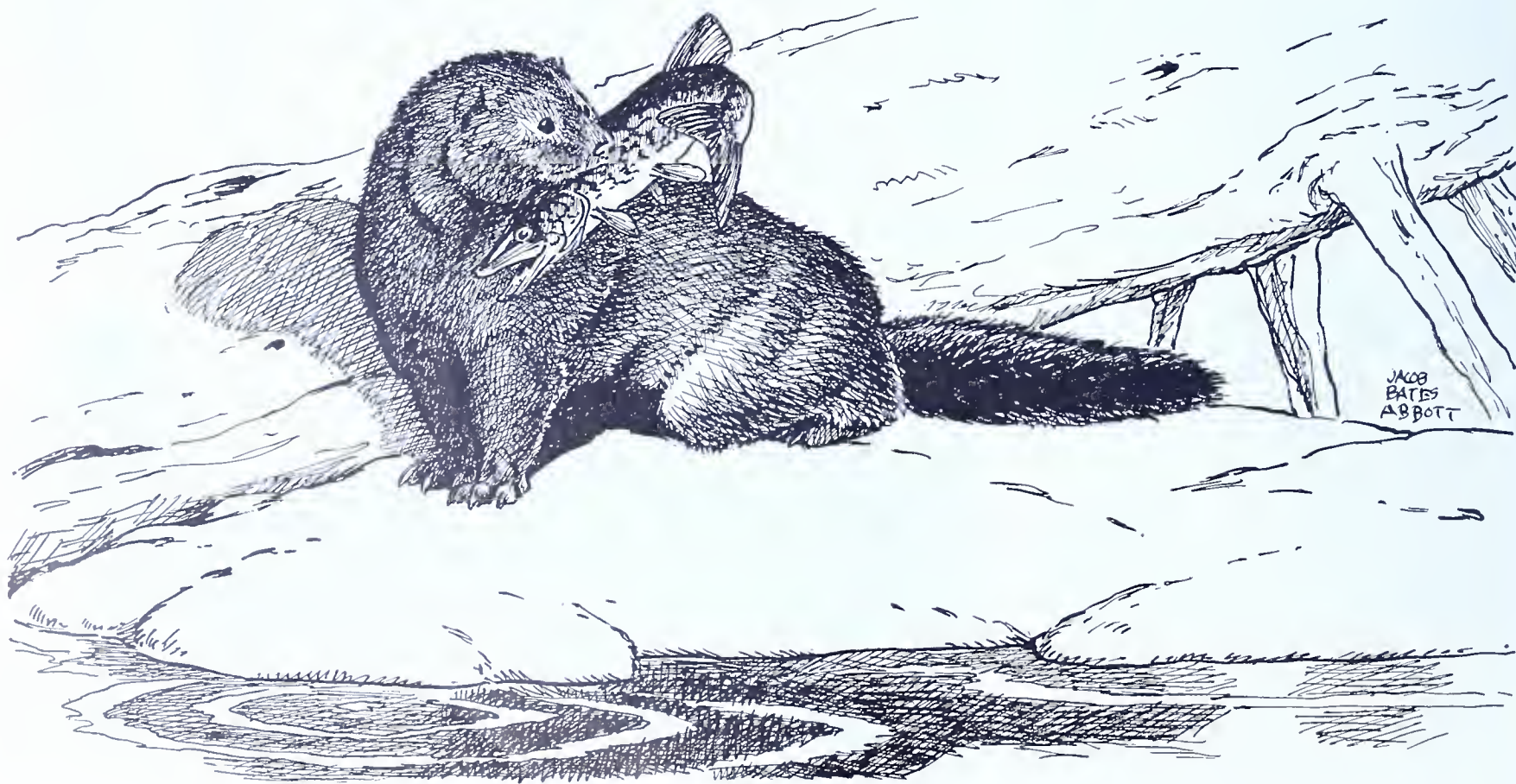
him out of a dozen pullets in a single night. Jeb's brother Sam, living near Pigeon, had surprised two of the critters in his hen house on successive nights. But that was a score or more years ago. Since then both the reduction of the lesser woodland denizens as well as the price on the wildcat's head practically cleaned out the only surviving representative of an interesting family; the lynx and mountain lion having gone their way many decades ago.

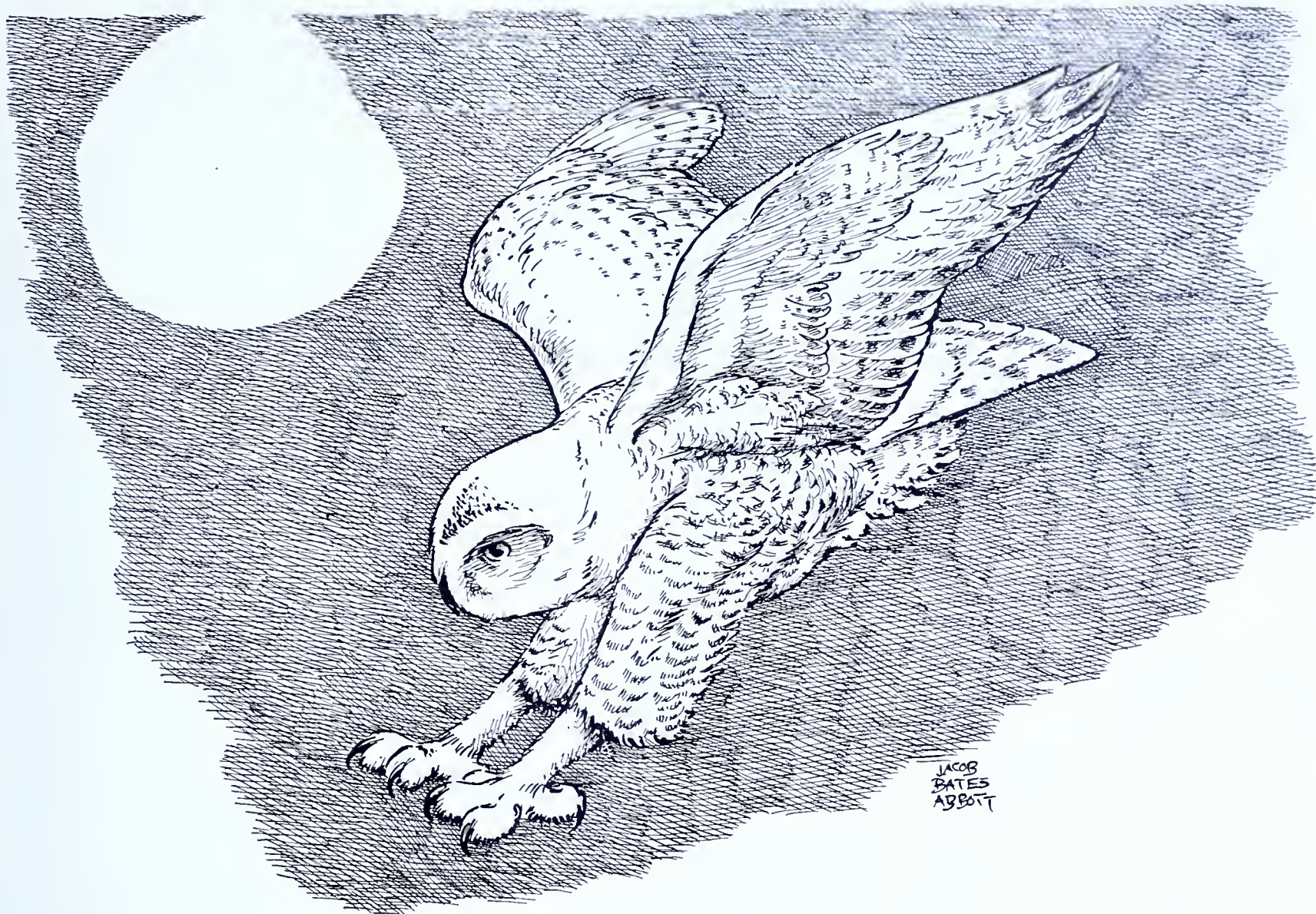
More recently was reported the following: In the spring of 1946, Joe Falkner then living on the Marienville-Kelletville road, was spending the night up near Lynch. Upon his return early next morning he found eighteen of the twenty half-grown ducks which he had but recently purchased, scattered over his barnyard. The fowl were all dead and variously mutilated. The owner reckoned that there were enough feathers scattered about to stuff a mattress. Upon his porch, where the animal had probably dragged itself, he found the body of his small terrier. The terrible wounds which the little dog had suffered indicated a member of the cat tribe. Joe quite naturally believed the killer to be nothing less than a mountain lion. Singularly, not a single clearcut track could be found in the jumble covering the barnyard.

For weeks after the raid Joe practically surrounded his premises with a maze of steel traps. But the only animal he succeeded in catching was the ancient hound he purchased to replace the terrier. After catching the hound a second time he pulled up his traps in disgust. Strangely enough nothing more was ever heard of the mysterious raider.

Most species of wildlife are not as easily wiped out as one is led to believe. On occasion survivors of a depleted species take to

(Continued on Page 27)





NORTHERN HUNTERS—

from Page 9

to crops as well as to fruit and ornamental trees. Young orchards . . . have been totally destroyed by these pests . . ."

A good place to watch rough-legged hawks is the country surrounding the Ontelaunee Reservoir, outside Reading. Over the low, snow-swept hills, studded with young cedars and spruces, these hawks fly slowly, quartering the fields in their methodical search for mice. Roughlegs spend about six months of the year within the borders of the United States, usually in the northern tier of states. Their chosen hunting grounds are in open country, wide, undulating fields, framed by low hedgerows, and particularly the vast salt marshes blanketing the coastal areas from Maine to the lower New Jersey peninsula. I have seen them, sitting erect

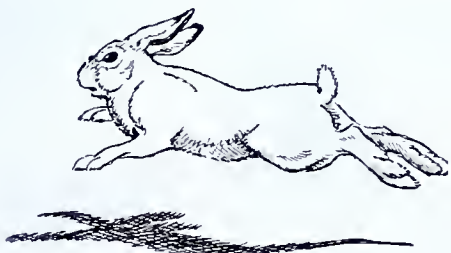
on hay stacks in the salt meadows near Newburyport, Mass. I have seen them, from train windows, coursing or hovering over the wilderness of tangled rushes along the Elizabeth and Newark flats. I saw a very black roughleg fly up from a snow-covered slope in Valley Forge Park and flap heavily over a low, wooded hill, his white-splashed tail marking his progress as the rest of his airborne body was lost against the dark of the massed winter trees.

American roughlegs nest on crags and rocky outcroppings on the treeless tundra of northern Labrador and Ungava, throughout the Canadian Provinces to the Yukon and western Alaska, where the lighter Siberian roughleg appears and the two species occur together. A large nest of sticks, lined with dried grass or tundra moss, is placed on a shelf of some high bluff, overlooking the bleak landscape. In Alberta and Saskatchewan nests of rough-legged hawks have been found high up in forest trees; near Churchill, along the western shores of Hudson Bay, nests were found in the tops of broken-off spruce stubs. Cliff nests, however, are the typical homes of these hawks and from such castles, commanding the sweep of barren lands and tundra, with blue foxes, caribou, musk oxen, arctic hares and lemmings for neighbors, their young are raised. Excellent photographs of the eyries of American and Siberian roughlegs may be found in *ALASKA BIRD TRAILS*, by Herbert Brandt;

LIFE HISTORIES OF NORTH AMERICAN BIRDS OF PREY, Part 1, by Arthur C. Bent and in Alfred M. Bailey's *BIRDS OF ARCTIC ALASKA*.

There is another big bird, not dark, but white, muffled with layers of snowy feathers from the top of his rounded head to his black, sickle-shaped talons, which regularly drifts down from the arctic wastes to winter along coastal New England and southward through Pennsylvania to establish erratic and casual records of invasion at many more southerly points. A white nightmare to lemmings and arctic hares, the snowy owl presents a vision sufficiently spectacular to raise the blood pressure of any enthusiastic bird watcher. Nesting as far north as Point Barrow, Alaska (far above the Arctic Circle) and Greenland, and never south of northern Quebec, Keewatin and Mackenzie, these big arctic owls have been recorded, during their winter wanderings, from such southern localities as Bermuda, Georgia, South Carolina and San Antonio, Texas.

In recent years the greatest winter influxes of snowy owls occurred in 1926-27, 1941-42 and 1945-46. Naturalists believe that these concentrated invasions follow periodic scarcity of the owls natural food (lemmings, arctic and varying hares and ptarmigan) in the north. For instance, reports from various Hudson's Bay Company



(Continued on Next Page)

posts stated that rabbits in northwestern Canada were almost exterminated by disease in 1926, although they were abundant in 1925. The reception given these ghostly visitors from the arctic wastelands is generally appalling. Instead of joying in the appearance of such rare and extraordinary birds, stupid gunners greet them with a load of number sixes whenever possible, which is nearly always, for the white owls have little fear of man. There are few hunters where they come from. It's an old story with us in this country. Instead of enjoying the sight of something strange and beautiful, we must pick it, or eat it, or sit on it, or collect it because it is so very uncommon. Never satisfied to gratify the higher elements of our esthetic senses, we've got to wrap it up and take it home. The same unselfish sportsmanship accounts for the fact that we haven't any more Great Auks, Passenger Pigeons, Eskimo Curlew or Whooping Cranes. Dr. Alfred Gross, of Bowdoin College, who carefully compiled records of the white owl invasion of 1926-27, estimates that over 5,000 were slaughtered during that winter's flight.

As a commentary on the high degree of marksmanship and Nimrodic skill required to blast the life from a snowy owl, I remember a January day in the late thirties when my son and I had gone down to Cape Anne, on the Massachusetts coast, to watch for white owls. We saw four that day: two perched on telephone poles, one crouched low on a rocky island just offshore and one sitting on the ridgepole of a house. So that I could get a good view of the owl's flight positions, we waved our arms to scare the bird off the roof. He didn't scare. Jack finally walked over to the side of the house and threw snowballs at that owl. At the third near miss the big bird condescendingly raised his wings and flapped slowly and silently away over the snow-choked salt flats.

In the 1926-27 invasion there were over 1,000 records from New England, 495 from New York State and 243 from Pennsylvania (Sutton, 1927). A grand total of 2,363 owls for 21 states. The total of snowy owl records in the 1945-46 migration was 14,409,

of which 4,475 were killed. New York State taxidermists alone handled over 800 owl corpses. This, the greatest arctic owl movement on record, really made the concentrated exodus felt in the northland. Hudson's Bay Company stations, in that winter, reported a dearth of owls from Baffin Land to Ungava. From the eastern Arctic this flight spread in southerly and westerly directions to such extremes as Charleston, S. C., Springfield, Illinois and Hastings, Nebraska. There have been casual records even more amazing: Bermuda (1843), Georgia (1931), Baton Rouge, Louisiana and San Antonio, Texas (1850). One snowy owl boarded a ship 320 miles off Newfoundland; two came into Boston on the S. S. WINIFREDIAN, having dropped on board 400 miles out.

What do these arctic adventurers eat when they visit us? Dr. Gross conducted examinations on owls taken in the '26-'27 and '41-'42 invasions, including Sutton's examination of 123 Pennsylvania-killed specimens. Stomach contents showed a varied diet: pigeons, dovebies, ruffed grouse, petrels, Norway rats, rabbits, meadow mice, moles and fish. In Massachusetts and Ohio rats and mice were the most frequent items of diet; in Pennsylvania cottontails and poultry occupied a top spot. Let Dr. Gross speak for himself: "In summing up the results of the stomach examinations and field observations of food habits, the evidence is about equally for and against the snowy owl so far as the economic interests of man are concerned. The species is beneficial by reason of its destruction of mice and, especially, that most despised of all rodents, the Norway rat, but it is also very destructive to game and song birds, poultry and certain useful mammals . . . However, most of us will agree that this owl does deserve a place on the protected list because of its aesthetic value. Who is there that does not receive a thrill of delight on seeing one of these white visitors from the north," (AUK, vol. 61, 1944).

Now that we have been discussing a wholly beneficial hawk and a handsome owl whose good and bad habits approximately balance one another, what are we going to say about an out and out brigand, a slash-

ing grey feathered torpedo, perhaps the most dauntless bird that flies? Well, I want to talk to those of you who prefer Cleopatra to Pollyanna; who admired General Patton, General Doolittle and the kind of nerve it took to hit the beachheads at Normandy, Guadalcanal and Iwo. The stuff that Grant and Sherman had—efficient cruelty or unswerving determination, depending upon which side of the fence you sat—the do or die spirit that made Custer immortal; such things have what it takes to make our spines tingle. All right; now let's take a look at our goshawk. His powerful feathered body contains one of the fiercest sparks of vitality to be found in any creature alive. Fearless in the face of man, he (or she) will defend his home to the last ditch, as many a climber's lacerated scalp and torn clothes will testify. He will snatch a full-grown Plymouth Rock from between the farmer's legs, knocking off his hat for good measure with the flailing wings of his take-off. He's deadly to ruffed grouse; sure, pen up your pheasants and prized black Minorcas! As for me, I'd rather watch a pair of goshawks around their nest than eat—southern fried chicken, chicken Maryland or chicken à la King. The ruffed grouse is a grand game bird, no doubt about this; and the goshawk is his most relentless enemy. Let us examine our kindly thoughts: why do we kill the goshawk? To protect the grouse, of course! Oh yes, and why are we so solicitous about the grouse's welfare? Why, so that WE can kill him, to be sure. Certainly from the grouse's point of view the outlook must be a little dim.

Largest of the accipiters (those long-tailed, short-winged hawks), the goshawk carries the most vicious set of weapons borne by any North American bird of prey, the golden eagle excepted. If you have access to a mounted goshawk, take a look at the hooks on the hind toe and inner front toe. No medieval Italian swordsmith ever designed more murderous stilletos than those razor-like sickles carried by *Astur atricapillus*. Big as a red shoulder, he has the power back of those talons to tear to pieces the big barred owl.



PREDATOR CONTROL—from Page 4

ridiculous to liberate a flock of pheasants when some man in authority has the idea that you also have to have a great horned owl, coyote, fox, weasel, mink, with perhaps a few timber wolves thrown in, to balance Nature. Actually, the balancing of Nature was all left with Man when God said, "Let man have dominion over all."

I said once, to two young university graduates who had specialized in Nature Study, when they were visiting our Sanctuary; "If the sportsmen liberate two hundred pheasants this spring, and the predators take fifty during the summer, will you have as many in the fall?" They both answered, "Yes, Nature will balance itself." The sad part of this is that both these young men are employed by the Canadian Federal Government in managing the destiny of our game. I cannot believe that the more pheasants the predators kill, the more pheasants you will have! I still think these young men ought to have majored in arithmetic rather than in wild life management.

I am proud to be a member of the Humane Society, and always have advocated the Buck law. Yet when the does are allowed to grow so old that their teeth start to drop out, and when they are allowed to become so numerous that there is not sufficient food for all, so that they are dying of starvation from both these causes, then I feel I am far more humane in wishing to see a proportion of them shot for food for humanity. Also, I consider it infinitely more humane to shoot them than, as some people advocate, to import some timber wolves into such an area, to tear these creatures to pieces, alive, and in that way to 'balance Nature.'

In one of our mid-western States a group of young biologists are trying a new experiment, namely that of training the farmers in the proper setting of traps to catch coyotes and foxes, so that their livestock may be protected. That is very good for its purpose. I feel, however, that game wardens should have the same training and spend the same time in the control of the predators that prey on the wild game birds and animals. I think it would be far more reasonable that the increase in deer herds be utilized as food for humanity, than that these animals should be eaten, twelve months in the year, by the predators. In other words, the deer in that State, are wild mutton, and the pheasants a species of wild barnyard fowl, just as essential to the needs of humanity as the domestic sheep, turkeys, chickens, etc. Let me put it this way: If there are one thousand head of deer in that State, and one thousand wolves, and this fall the hunters shoot five hundred deer for food, then someone should shoot, or trap, the same number of wolves. The same proportion of control, or control methods, should be applied to the enemies of the upland game birds; because if man takes his share of the edible wildlife for food, and no control measures are employed against the enemies of the wildlife, then Nature is out of balance. It is up to man to maintain the balance of Nature. In the name of God—and I say it reverently—let us apply common sense to this problem, and not so much nonsense.

When Christopher Columbus landed in North America and fired the first shot, he upset Nature's balance. As Mr. Harold Titus, the prominent writer on outdoor themes, said recently: "When



Manitoba research workers found that nine percent of all duck nests were destroyed by skunks.

the first steamship went up the Mississippi and blew its whistle it interfered with Nature." Man has combined his killing of wild animals and wild birds with that of the predators, so that today Nature is all out of balance, and man is asking "What happened to the ducks?" Some thirty or more years ago, my father, the late Jack Miner, both in his writings and from the lecture platform, said this: That seventy-five percent of the wild duck eggs laid in Western Canada, never matured to full grown birds able to fly out of this country. Last year, some thirty years after he made that statement, it was proved correct by the following fact:

At Delta, Manitoba, men stationed at the research post found several duck nests, and visited them daily. Of these nests watched, twenty-one percent were destroyed by crows, eleven percent by ground squirrels, and nine percent by skunks. In other words, forty-one percent of them were wiped out before ever the ducklings were hatched. The readers can imagine what percentage of the young would be devoured by snakes, turtles, hawks, owls, fish, and other predators, after they were hatched. One is compelled to believe that the statement made by my father, so many years ago, was accurate.

Personally, I do not hunt or shoot. But I see no more harm in taking the overflow, or surplus increase, of our wild game than in taking that of our barnyard flocks. I feel this increase was intended for man's use, and not for the upkeep of hordes of predators that have been allowed to increase out of all proportion to the wildlife on which they subsist. I take this attitude rather than that of the school of thought which believes that "the more game the predators kill, twelve months in the year, the more game you will have!"

UNDER THE HEMLOCKS—from Page 24

remote or inaccessible sections and attempt a comeback. Also, they may filter back into regions where they had not occurred for decades. As an example, the recent discovery that pumas had returned to the Province of New Brunswick causes some to wonder if they were not there all of the time; their alleged disappearance attributable to the fact that they successfully avoided man until they were recently "discovered." On the other hand, if the animals came from elsewhere, then, from where?

While inspecting his trapline on the second morning after the snowstorm, Dwight encountered unfamiliar tracks at the edge of the spring run near which he had made most of his mink sets. They were undeniably cat tracks except that they were much too large for the wild housecat variety. Not until he had followed the trail for some minutes did it occur to him that it could be that of a wildcat.

The trail shuttled back and forth between

the stream's edge and the hemlock woods. At various points along its devious length were recorded the activities of the animal, as plain to the experienced woodsman as though he was witnessing them first hand. There in a grass tussock the cat uncovered the cozy nest of a white-footed mouse. Some yards farther he succeeded in catching an unwary chickadee as attested by a few scattered feathers, the marks of the leap plainly imprinted on the snow. When the feline arrived in the vicinity of the red squirrel set he put up a grouse and was rewarded with a mouthful of feathers.

The tracks continued on toward the set and Dwight's pace quickened in anticipation. Shortly, the trapper could make out the low hemlock bough near which he had made the set. But, oddly enough, things looked just as he had expected to find them, that is, as he expected to find them before encountering the cat tracks.

At a distance of a score or so feet the trapper suddenly halted when he spied an animal crouching in the shadow of the bough; his heart lurching excitedly when he perceived it to be a huge bobcat. With a silent snarl on its flat face the cat watched the man's every move.

Dwight worked his way through the deep snow to a point where he could easily and safely view his captive. Almost at once he recalled Joe Falkner's experience.

"Why, you look big enough and ornery enough to have done it," quietly observed the trapper.

At the sound of the man's voice the cat crouched deeper into the snow and let loose a venomous spit.

Dwight's answer was given by his single-shot trapline pistol.

"It'll stretch a good four feet," muttered the trapper in satisfaction as he gazed down on the dead cat.

LAST TRIBUTE TO A COONHOUND—from Page 10

I could go on and on telling you about hunt after hunt. With "Old Bid" however, his last hunt will show you what a great dog he was and why I pay tribute to this coonhound.

"Old Bid" had been retired for about six months due to the fact that his old age had made his joints so stiff that he used to whimper with pain when he tried to move fast. However, on this fatal night he barked and made such a fuss as we loaded the other dogs in to the car, that we decided to take him along, thinking that it would do him good to get a little exercise.

When we arrived at the stand of timber that we had decided to hunt, we turned the dogs loose, and "Old Bid" started right out with his graying muzzle close to the ground. We let him go thinking he would not go far until he would turn and hobble back to us. However, we were wrong, fifteen minutes passed, twenty minutes passed and no sight of him. At the end of a half-an-hour,

getting no response to our calls, we started out in the direction he had taken to try and find him. We walked for about fifteen minutes without seeing or hearing him. Then one of the fellows said, "Stop, I think I hear him." Sure enough, when we stopped, above the night sounds, his bark drifted down to us from a ridge up on our left. He was moving very slowly and just barking every now and then. By his antics and from past performances we knew he was cold trailing. And I was on the verge of going after him but one of the fellows said, "Oh leave him go, none of the other dogs have hit anything yet. If they do I'll go get him!" So we sat down to give him time to see if he could work out the cold trail he was on. In the meantime the other dogs came in and we tied them up so they would not go out and bother him. We sat there for an hour just listening to him barking now and then. Then very faintly we heard him barking treed. From the sound of his bark we thought he was clear

over the top of the next ridge, about a mile from where we were sitting. But, to our surprise just as we climbed out of the valley we heard him in a little hollow not more than halfway up the ridge. It wasn't but a half-mile from where we had been sitting. When we walked up to the tree he was barking under we found him laying down barking very weakly. Thinking he was just tired we petted him for his good work, then started to shine the tree to find the coon. After a few moments of shining our lights up and down the length of the tree we picked out the coon's eyes. He was backed up against the trunk of the tree with his head pointing out towards the end of the limb he was laying on. He was a big coon because the space between his eyes was extra wide; in fact he was the biggest "Old Bid" had ever treed. When we shot him out of the tree, he came crashing down through the limbs and hit the ground with a dull thud. "Old Bid" heard him hit, and he raised up off the ground and took a few feeble steps towards him, but he collapsed before he reached the downed coon. I rushed over to see what was the matter with him, and just as I reached him he gave a deep sigh and lay still. I felt his chest and found it still. "Old Bid" was dead! Great as his heart was, it had quit at last.

We buried "Old Bid" there underneath the tree he had run his last coon up, among the hills and valleys he loved to hunt, with the call of the Hoot Owl plaintively ringing in our ears. For I felt that "Old Bid" knew that night that his time to depart this earth had come, and he wanted to end it on the trail.

* * *



E. Stanley Smith

OUR SOIL AND WATER PROBLEM—from Page 5

At the head of Pymatuning Lake, the half mile fill, costing millions of dollars, carrying No. 6 Turnpike and the railroad crossing the marsh, was utilized as a dam by building an inexpensive concrete "U" ten feet high on the upper side of the Culvert. This formed a beautiful lake of about 2,500 acres, the only wild waterfowl and shore bird sanctuary in the state. Yet for years the farms of the area opposed the idea of a lake and instead lobbied in Harrisburg to drain the swamp by a canal for the purpose of planting onions and celery. This would have resulted in another arid area, subject to cloudbursts and the periodic flooding of towns and plants on the Shenango river below.

Another fine example is Babcock Boulevard fill crossing Pine Creek in North Park, just beyond the city line of industrial Pittsburgh, where the entrance to the culvert was raised about ten feet to form a 72-acre recreation and fishing lake, enjoyed by thousands of Pittsburghers, young and old.

Yet for years in this country the policy was to drain swamps and lakes on the false theory that this process would create more farm land. During my younger days I traveled throughout the North American continent, equipping coal mines with machinery and also hunting. I saw many marshes and lakes, especially in our North Central states, and Canada, which once teemed with waterfowl, shore birds, fish and other species of wildlife, become utterly devoid of all wildlife when drained. Much of this land, when drained, became utterly unfit for agriculture.

At the Migratory Wild Waterfowl Conference in Washington, D. C. April 4, 1932, which was attended by conservationists from every part of the nation, I warned that if this policy were continued, through lowering of the water table, this land would eventually become a desert. Then in 1934, came the dust bowls.

Since Ducks Unlimited, organized in 1937, the Izaak Walton League and Friends of the Soil became interested, this destructive policy of drainage is being reversed. Today we are not only restoring many of the drained lakes but creating others. The sportsmen who hunt wild waterfowl help pay for this through a two-dollar license

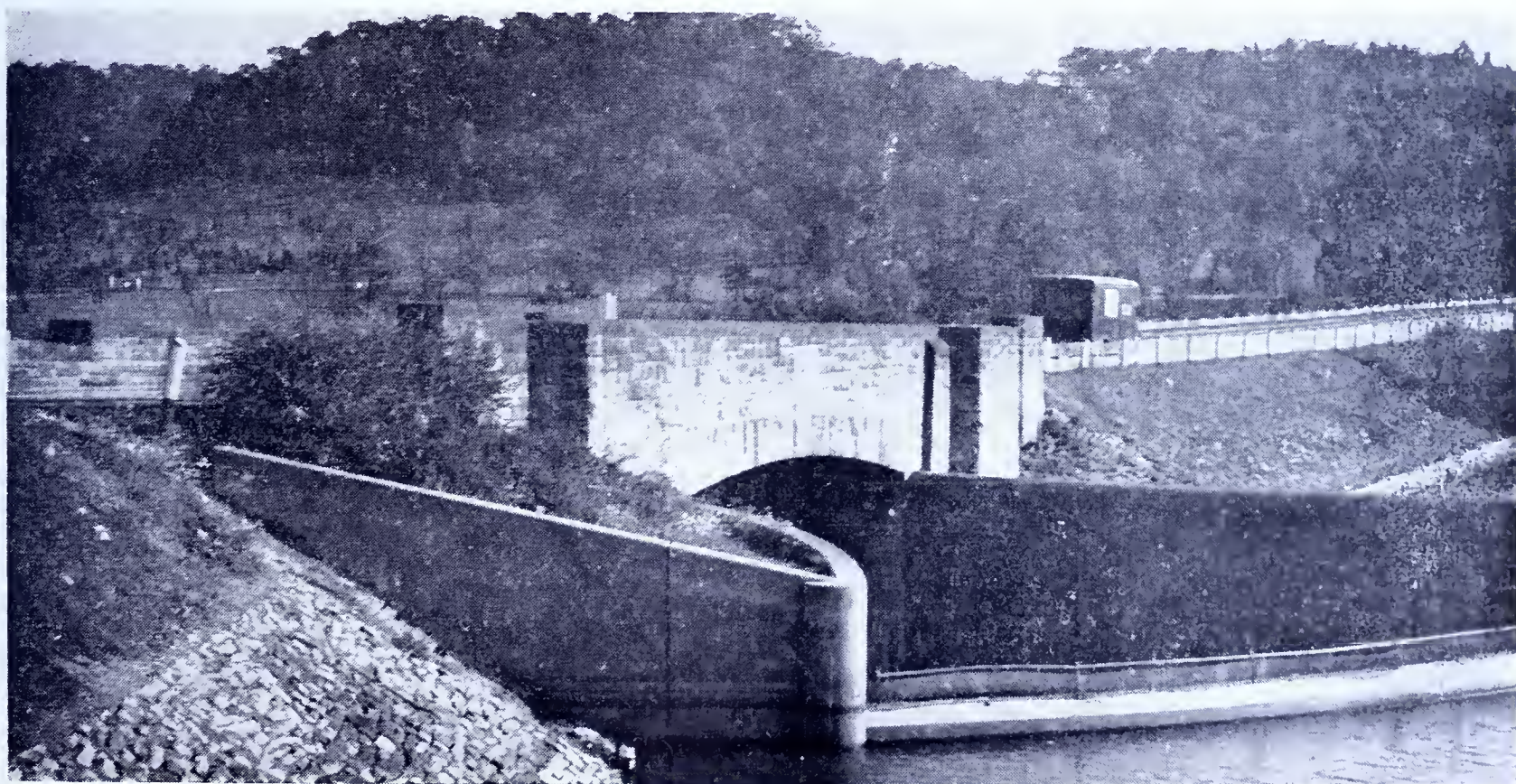


"Countless beavers were building dams in ravines at heads of streams, conserving the top soil."

fee and our Federal Government's Fish and Wildlife Service, awake to the dangers, provides energetic leadership.

For many years I have advocated, in addition to digging lakes and ponds on farms, the utilization of many of the thousands of road and railway fills spanning ravines or hollows by this simple and inexpensive method of raising the upper ends of the culverts to form ponds and lakes. These would not only perform the important function of retaining the soil but would irrigate the surrounding land, raise the water table, furnish water and fish for our farmers and a habitat for domestic and wild waterfowl and shore birds. A plentiful water supply, in many cases, would also reduce the farmer's fire insurance.

Water is the lifeblood of the world. No life can exist on this globe without it. So let us conserve and keep it pure.



Pete Krass Photo

The Babcock Boulevard fill crossing Pine Creek in North Park, just beyond the city limits of industrial Pittsburgh.

STOCKMAKING—from Page 11

Always beware of cutting away wood that has been accidentally spotted with the Prussian blue. This usually happens as the frame is slid into place in the stock and bumped against the sides of the tang recess.

Now trim off all superfluous wood from the underside of the pistol grip, allowing 1/8 inch for waste, and fasten the frame to the stock with the receiver clamp. Then remove the triggers, springs, and safety lever and draw the exact outline of the trigger bar on the underside of the stock as you did with the upper tang. Rough out the wood and seat the bar with the aid of the Prussian blue, taking care not to tilt it to either side. Determine the proper distance between the tips of the tangs by the length of the rear tang screw and bed the trigger bar so that this distance results. Now replace the triggers and springs and cut out spaces for them. Drill a hole up through the stock for the safety lever and enlarge it with a chisel to fit.

Mark the centers of all tang screws with an awl. Drill these holes first with a very small drill, then, by using successively larger drills you can straighten the holes and enlarge them to the screw size. One precaution should be observed—don't allow the drill to drift forward of the correct location as this will result in the action pulling away from the wood. It is far better to drill the holes a bit to the rear of the mark.

By attaching the frame and trigger bar to the stock by means of the tang screws you can remove the receiver clamp. Now cut off the excess wood on either side of the stock where the lock plates are to be placed, allowing only 1/32 inch for waste.

Dismantle the lock by removing the sears, tumblers, mainsprings, etc. Lay the lock in its slot on the side of the frame. By cutting out a little wood at a time and sloping the sides of the cut you should be able to seat the plate without any noticeable gaps between the wood and metal.

Don't work too far ahead of the actual bedding or you are likely to get the plate out of alignment, in which case it will not enter the snug fitting slot in the side of the frame. Test the work with the lock plate as it progresses and do the final fitting with Prussian blue. When the desired depth is attained reassemble the lock and fit all the parts into the wood, drilling a hole for the end of the sear and giving the tumbler, spring and sear plenty of clearance to prevent binding. Check the overlap of the sear end and trigger-fin—this must be sufficient but not excessive. Last of all, don't remove more wood than necessary, as a side-lock double gun stock is too fragile at best.

Now, with the front lock-plate screw and a wood screw fasten the plate in place temporarily and inlet the other lock plate in the same manner. In most shotguns the ends of the sears barely clear each other. Check this distance on yours by removing the trigger plate and examining it through the trigger-fin mortice.

With both plates neatly (I hope) bedded, drill a hole through the stock for the long

rear lock plate screw that draws them together.

There's not much to inletting the trigger guard. First trim off all excess wood, allowing a reasonable amount of waste. Measure off the outline of the tang of the guard and cut out the wood as neatly as possible. Chances are you will find the tip of the guard the only difficult part to fit, but be careful to get a neat bedding job here, for any defects are readily noticeable as the gun reposes in your gun cabinet or rack. Now you can drill a hole for the wood screw a hair's breadth back of the center of the hole, attach the trigger guard and the stock inletting is complete.

Now let's have a palaver about some of the other types of shotguns. The box frame doubles such as the Parkers, Ithicas, Foxes, etc., are the most common of the twin-tube sort. These have no side-lock plates; the hammers, sears and mainsprings are housed in mortices in the frame itself, consequently this type gun is much less complicated to stock than the side-lock type. The frame and trigger bar are stripped of all parts and inletted in the manner of the side-lock gun, then the hammers, top lever and safety assemblies are installed and fitted into the wood. The frame is then secured in place with the receiver clamp and the sears let into the wood, with care taken to assure sufficient clearance for their free operation. Finally, the triggerguard is fitted in the usual manner.

The inletting of a pump or slide action repeater differs radically from that of the double barrel. To the well-equipped wood butcher with a floor model drill press or a lathe this would be the easiest of all types to inlet; to the unfortunate fellow with only hand tools, the "corn-sheller" can be exasperating, to say the least. Boring that hole for the buttstock bolt completely through the stock is the tough part. (Fig. 2a shows an X-ray view of a pump gun stock.) The easiest method is to first bore the large hole for the head of the bolt and washer. By marking the angle of the hole on the side of the blank you can steer a fairly accurate course. Then run a long bit or drill from this hole completely through the stock. By using the first hole as a guide and keeping the drill shank centered therein, the two holes will be fairly concentric. If, when it finally emerges from the other end of the stock, the small hole appears close enough to where it was supposed to come out you're a lucky fellow, but by using a blank lots thicker than ordinarily necessary you can stretch your luck considerably.

Should you have no taper reamer with which to form the hole for the bolt socket you can ream it out with a hand-made reamer made by grinding an old file to the correct size and taper and backing off the edges so it will shave off the wood when rotated with a tap wrench (fig. 2d). First ream the hole to a size that will allow the socket to enter up to the shoulder. Then smear Prussian blue on the shoulder and on the end of the trigger plate and, keeping the gun in correct vertical alignment, rap it

with a mallet to show the location of these projections. Cut away the wood until the rear face of the frame touches the front of the stock, then start letting the wood into the groove that encircles the face of the frame. Bed the entire frame carefully, reaming out the tapered hole again if necessary.

If you have a lathe or a large drill press you can do this work on centers, eliminating the danger of boring right out through the side of the stock. Admittedly this is much less exciting than the hand method, but it's also less apt to ruin a good walnut blank.

Shotgun fore-ends aren't the easiest things to inlet and too many fellows rip through this job in a reckless manner, as though a fore-end were too insignificant to merit their utmost skill. This line of thought has ruined the appearance of many an otherwise handsome firearm, so don't make the same mistake yourself. Use the same care in fashioning this part as you did in making the stock.

The rectangular blank for a side-by-side double fore-end should be 1/4 inch thicker and wider, and 2 inches longer than the finished part. Scribe the usual center line around the entire piece. Strip the fore-end iron of all small parts such as springs, latches, etc., and fit it to the wood as you did the upper tang of the frame. Seat the iron far enough below the top surface of the blank to allow for the barrel channels and drill suitable holes for the screws. Cut out the mortices for the latch, install all metal parts and completely assemble the fore-end. Then rough out the barrel channels, allowing 1/4 inch for further cutting at the forward end. Following this initial carving you can let the barrels in gradually, spotting with Prussian blue as you go, until the desired depth is reached. Watch your step, though, and don't let them in too deeply, as this will cause the fore-end to fit loosely, and I, for one, can think of lots more desirable things than a fore-end that rattles. With the proper amount of wood removed the fore-end will close tightly against the barrels.

A beaver-tail fore-end is naturally more difficult to inlet because of the additional depth to which the barrels and fore-end must be bedded. Don't forget to allow plenty of wood on the top of the blank, as this type should cover at least half the diameter of the barrels. The extra 2 inches in length allowed on these blanks are to provide a good vise-hold for the shaping operation.

Due to the danger of becoming misadvised, automatic ejector mechanisms should not be dismantled by the inexperienced stockmaker but should be inletted "in one piece." Single triggers are even more delicate and it's best if the beginner keeps away from them entirely. There are billions of ways for a tyro stockmaker to louse up a good gun without resorting to tearing apart these complicated contraptions.

So much for the inletting of shotgun actions and fore-ends; in the next installment we'll take up the problems of rifle inletting. If you're the owner of a single-shot or bolt-action shotgun you will probably find this next article helpful in inletting your type scattergun, as this phase of re-stocking is similar to that of rifles of the same type.

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Months of October and November, 1949

ALLEGHENY—\$3,027

Adams, Robert K. Box 473, Morgan. Hunting small game in party of more than 5 persons	\$5.00
Allen, Alfred Nicholas, 716 Clarissa St., Pittsburgh 19. Hunting game in special dog training area	25.00
Arnold, Arthur, 3376 Webster Ave., Pittsburgh. Possessing loaded rifle in vehicle in motion on highway	25.00
Banks, William J., 427 Kelly Ave., Pittsburgh. Shooting at unprotected target in big game season	10.00
Baskitis, Anthony, Center Ave., Elizabeth. Shooting within 150 yards of occupied building	25.00
Beccots, Charles, 2132 Monongahela Ave., Swissvale. Killing grouse on off day	25.00
Bel, Edward L., 265 Washington Ave., Whitaker. Hunting rabbits after 5 P. M.	15.00
Benish, Mark A., Box 226, Irwin. Hunting wild ducks after closing hour	15.00
Bercini, George William, 1280 Carnahan Ave., Pittsburgh 20. Hunting without resident license	20.00
Blair, Wilmer L., 5812 Phillips Ave., Pittsburgh. Hunting without resident license	20.00
Bonner, Joshua, 7303 Burton Ave., Swissvale. Violation of Commission rules killing one grouse	25.00
Booth, Louis A., 313 Tanner St., Elizabeth. Hunting without resident license	20.00
Brady, James Calvin, 4107 St., Johns Way, Pittsburgh 1. Hunting small game between the hours of 5 P. M. and 7 A. M.	15.00
Bresnock, Frank J., Box No. 41 North Bessemer. Hunting without resident license	20.00
Brooks, William Arthur, 104 Rogerton Ave., Pittsburgh 12. Hunting without a resident license	20.00
Brooks, William J., 104 Rogerton Ave., Pittsburgh 12. Hunting without resident license	20.00
Bruce, William E., Glenshaw. Possessing loaded rifle in vehicle standing on highway	10.00
Brunck, Charles R., 7021 Bennett St., Pittsburgh 8. Possessing two wood duck after closing time	20.00
Bryan, Robert Moses, 358 Magazine St., Carnegie. Hunting without resident license	20.00
Burdick, Harry C., Wellsville. Hunting deer in close season	100.00
Cacia, Nicholas V., Box 427, Imperial. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Catola, Louis, 17 Fountain Ave., Crafton. Possessing one wood duck over season limit	10.00
Chontos, Francis Joseph, House 104, Large. Hunting without resident license	20.00
Crisswell, John E., 52 Sunny Drive, Pittsburgh. Shooting at ducks after hours	15.00
Curry, Richard J., 7201 Tioga St., Pittsburgh 8. Shooting at unprotected target in big game season	10.00
Dagnall, Thomas Peter, 1201 Mifflin Road, Pittsburgh 7. Hunting small game in a party of more than 5 persons	5.00
Dallas, Lee Anthony, Washington Rd., Pittsburgh 28. Shooting within 150 yards of occupied building	25.00
Danick, John, 930 Western Ave., Pittsburgh. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Davies, William C., 3562 Beechwood Blvd., Pittsburgh. Hunting game between 5 P. M. and 7 A. M.	15.00
Davis, Alphonso, 331 McCready St., Sewickley. Shooting at game across a public highway	25.00
Davis, Robert A., R. D. No. 1, Box 523, Clairton. Hunting without a resident license	20.00
DiCicco, Anthony Edward, 3526 Broadhead Manor, Pittsburgh 5. Hunting without a resident license	20.00
Dewell, Ernest J. Jr., 844 Penna. Ave., Coraopolis. Killing ruffed grouse in closed season	25.00
Dillon, John R., R. D. No. 2, Coraopolis. Hunting rabbit with shotgun containing more than three shells	10.00
Ditmar, William G., 220 S. Aiken Ave., Pittsburgh. Shooting at target more than 200 yards from camp in big game season ..	10.00
Donati, Pete, R. D. No. 9, South Hills, Pittsburgh 16. Hunting small game between 5 P. M. and 7 A. M.	15.00
Donati, Anthony, R. D. No. 9, South Hills, Pittsburgh 16. Hunting small game between 5 P. M. and 7 A. M.	15.00
Dryer, William, Willet Rd., R. D. No. 6, Pittsburgh. Killing pheasant hen	25.00
Durst, Elmer A., 117 1st St., Terrace. Possessing one wood duck over limit	10.00
Ewart, James A., 2506 Kingwood St., Pittsburgh 27. Hunting game between 5 P. M. and 7 A. M.	15.00
Ewart, John A., 2506 Kingwood St., Pittsburgh 27. Hunting small game between 5 P. M. and 7 A. M.	15.00
Faid, William Alfonse, 606 Haverhill, Pittsburgh 21. Killing skunk in close season	10.00
Fanell, Alexander, 2321 McCook St., Pittsburgh 12. Possessing loaded rifle in vehicle standing along highway	10.00
Faub, Raymond C., Clifford Ave., Blawnox. Failure to produce roster of party hunting big game	25.00
Fedor, Michael, 312 Erie St., McKeesport. Shooting across highway while hunting	25.00
Fife, William Cladwell, 131 Center Ave., Oakdale. Hunting without resident license	25.00
Flohes, Leon, 1017 Bellevue St., Creighton. Shooting at random in big game season	10.00
Freudenreich, Leo Charles, 148 Parker St., Etna. Hunting small game in a party of more than five (5) persons	5.00
Gallaway, Daniel Edward, Corison Hollow, Glassport. Hunting without resident license. Hunting rabbits with shotgun containing more than three shells	30.00
Gallaway, William, Corison Hollow, Glassport. Hunting without resident license	20.00
Garbart, George W., 57 Montclair Ave., Pittsburgh 24. Shooting at ducks after closing hour	15.00
Garber, John 84 Hodgson Ave., Ingram. Pittsburgh. Hunting small game in a party of more than 5 persons	5.00
George, Robert T., 1234 Album St., Pittsburgh. Shooting into live tree in big game season	10.00
Handon, Jack, C., R. D. No. 4, Coraopolis. Possessing one fox squirrel in close season	10.00
Harper, Robert W., Harper Rd., Wireton. Hunting raccoon on Sunday	25.00
Heck, Frank H., 312 Second Ave., Tarentum. Hunting ducks 5 P. M. and 7 A. M.	15.00
Hegner, George Homer, 619 Fountain St., Sewickley. Possessing loaded shotgun in vehicle standing along public highway	10.00
Hellam, Edward T. 456 Home St., McDonald. Hunting wild ducks after closing hour	15.00
Henderson, Robert E., 13 Butler St., Millvale. Hunting small game in party of more than five (5) persons	5.00
Hickey, Joseph T., Wireton. Hunting raccoon on Sunday	25.00
Hodak, Frank J., Box 124, Wildwood. Hunting without resident license	20.00
Holland, Edward W., 1509 Centennial St., McKeesport. Hunting game between 5 P.M. and 7 A.M.	15.00
Hubsten, Berger Andrew, R. D. No. 8, Box 403, Pittsburgh. Hunting in safety zone	25.00
Hughes, Leslie M., 1204 Orin Ave., Etna. Shooting at target more than 200 yards from headquarters in big game season	10.00
Humes, Howard H., 1415 Harvard Ave., Natrona Heights. Failure to tag deer within one hour after killing	10.00
Jackson, Elmer C., 146 Orris St., Munhall. Attempting to take deer in close season	100.00
Jeffries, Floyd, 1608 Manor Ave., McKeesport. Possessing loaded rifle in vehicle standing along highway	10.00
Jordan, Walter G., R. D. No. 3, Box 214, Gibsonia. Hunting small game in party of more than 5 persons	5.00
Karabinos, John E., 110 S. 11th St., Pittsburgh 3. Hunting without license	20.00
Kestner, William Daniel, 101 Onyx St., Pittsburgh 10. Hunting small game in a party of more than 5 persons	5.00
Kirsch, William Frederick, 3044 Provost Road, Pittsburgh 27. Failure to show hunter's license on demand of farmer	20.00
Klawns, Edward S., 4019 Fairfield Ave., Homestead. Possessing loaded shotgun in vehicle in motion on highway	25.00
Klingensmith, Donald L., 1112 Tropical Ave., Pittsburgh 16. Hunting with firearm not properly accompanied, when under 16 years of age	20.00
Knoff, Harry J., 2948 Sheraden Blvd., Pittsburgh 4. Hunting Small game between 5 P. M. and 7 A. M.	15.00
Kurek, William J., R. D. No. 5, Crafton. Possessing loaded rifle in vehicle standing along highway	10.00
Lelerzapf, William C., 242 Shaler St., Pittsburgh 11. Possessing deer not properly tagged	25.00
Linder, Fred J., 94th St., Sharpsburg. Hunting ducks between 5 P. M. and 7 A. M.	15.00
Losago, Arthur Richard, 408 Second St., Heidelberg. Hunting rabbits with a shotgun containing more than 3 shells	10.00
Mac Fadden, Robert B., 1968 Federal St., Pittsburgh 12. Hunting without resident license	20.00
Matora, John, 368 W., 13th Ave., Homestead. Entering state game refuge to fish	25.00
Mazzochi, Salvatore, 1173 Steuben St., Wabash, Pittsburgh. Possessing loaded rifle in vehicle in motion on highway	25.00
McAnany, James Thomas, Westland. Hunting without resident license	20.00
McCartney, Ronald Lee, R. D. 3, Coraopolis. Hunting without a resident license	20.00
McCullough, Thomas Elmer, R. D. No. 1, Clinton. Hunting without resident license	20.00
McMillan, Richard W., 850 Fordham Ave., Pittsburgh. Transporting bear less than one year old	200.00
Medix, Daniel T., 901 Peerment Ave., Pittsburgh 16. Possessing loaded rifle in vehicle standing along highway	10.00
Medix, Paul L., 544 Moreland Drive, Pittsburgh 16. Possessing loaded rifle in vehicle standing along highway	10.00
Miller, Sylvester, 318 State St., Clairton. Hunting without resident license	20.00
Nesbit, Howard William, R. D. No. 2, Allison Park. Hunting without resident license	20.00
Mozzy, Edward J., 1040 N. Bluff Drive, New Kensington. Failure to produce roster of party hunting big game	25.00
Mungal, August J., 1007 Tropical Ave., Pittsburgh. Shooting at random in big game season	10.00
Myers, Carl A., 118 Rochester Rd., Pittsburgh. Shooting at ducks after hours	15.00
Nagle, Ernest J., 630 E. End Ave., Pittsburgh. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Newby, Nick Jr., 1021 Woodlawn, Braddock. Possessing hen pheasant in close season	25.00
Newcome, Victor T., 9214 Vantyne St., Pittsburgh 21. Hunting without resident license	20.00
Ninay, Henry J., 3815 Green Ave., Terrace. Hunting ducks between 5 P. M. & 7 A. M.	15.00
Page, Joseph Francis, 402 Ridge Ave., Springdale. Hunting between 5 P. M. and 7 A. M. Hunting rabbits with a shotgun containing more than 3 shells	25.00
Pampena, Anthony, 1107 Paulson Ave., Pittsburgh 6. Shooting at protected bird	10.00

Pawiak, Martin J., McMurray Road, R. D. No. 2, Bridgeville. Hunting small game in party of more than 5 persons	5.00	Wilson, Jack William, R. D. No. 2, Bridgeville. Hunting and disturbing wild birds and wild animals in safety zone	25.00
Perkins, James, 7313 Augus St., Swissvale. Killing one grouse on off day	25.00	Withrow, J. R., 7111 G & Ave., Neville Island, Pittsburgh 25. Failure to tag deer within one hour after killing	10.00
Phillips, Warren Alexander, 3333 Huxley St., Pittsburgh 4. Hunting small game between 5 P. M. and 7 A. M.	15.00	Yalenty, Norman, 1414 N. Murtland Ave., Pittsburgh 8. Shooting at a protected bird	10.00
Pleska, Nick, 424 Suncrest St., Pittsburgh 10. Hunting without resident license	20.00	ADAMS—\$315.00	
Pohr, Charles Henry, 148 Parker St., Etna. Hunting small game in party of more than 5 persons	5.00	Kint, Dorey R., R. D. No. 2, Gettysburg. Throwing artificial light on deer while in possession of a firearm	100.00
Pozzi, Jacob, R. D. No. 1, Bridgeville. Hunting without resident license	20.00	Leach, David Erwin, R. D. No. 2, New Oxford. Possessing loaded rifle in car standing along highway	10.00
Rager, Robert N., R. D. No. 3, Coraopolis. Hunting without resident license	20.00	Little, Rodney J., McSherrystown. Hunting, pursuing or disturbing wild game in safety zone	25.00
Reilly, Thomas J., 2340 Carson St., Pittsburgh 3. Failure to display license tag while hunting	20.00	McDannel, Sam, Iron Springs. Hunting without resident license	20.00
Ripple, Guy S., 89 Frazier Ave., McKees Rocks. Possessing loaded rifle in vehicle standing along highway	10.00	Myers, Martin L., 330 W. Middle St., Gettysburg. Hunting without license	20.00
Ritchie, Elmer R. D. No. 2, Library. Hunting without a resident license	20.00	Oyler, Ralph Z., 38 W. Broadway, Gettysburg. Possessing loaded shotgun in vehicle standing along public highway	10.00
Roetter, Richard Alfred, Box 14 W. Seavey Road, Millvale 9. Hunting within 150 yards of occupied building	25.00	Thompson, Carl V., R. D. No. 2, Gettysburg. Throwing artificial light on deer while in possession of firearm	100.00
Rossman, John Nicholas, Hudson Ave., Oakdale. Hunting without resident license	20.00	Waddell, Ruben C., R. D. No. 4, Gettysburg. Hunting without resident license	20.00
Rupert, George Fern, Jr., 6618 Baker St., Pittsburgh. Casting rays of light on deer while possessing a loaded rifle—(Doing same twice)	100.00	Williams, Charles Henry, R. D. No. 3, Hanover. Possessing loaded rifle in car standing along highway	10.00
Ruth, Gerald Delmar, 14 Eilers St., Pittsburgh 13. Possessing loaded rifle in vehicle standing along highway	10.00	ARMSTRONG—\$960.00	
Ruth, Harold L., 1046 Steuben St., Pittsburgh 20. Possessing loaded rifle in vehicle standing along highway	10.00	Allen, Roger Wade, Distant. Killing ringneck pheasant hen	25.00
Sabolsice, Stephen, 418 Lloyd St., Pittsburgh. Hunting game prior to opening hour on first day	15.00	Allen, Wade W., Distant. Hunting game between 5 P. M. and 7 A. M.	15.00
Scarfione, Angelo M., Box 679, Imperial. Hunting squirrel between 5 P. M. and 7 A. M.	15.00	Bier, Paul W., R. D. No. 2, Box 492, Leechburg. Killing a ringneck pheasant hen	25.00
Scriven, Stepney, 2939 Bedford Ave., Pittsburgh 19. Hunting game in a special dog training area	25.00	Bianiar, Frank, R. D. No. 2, Ford City. Hunting without resident license	20.00
Semko, John William, 205, Border St., West Elizabeth. Loaded shotgun in vehicle standing along highway	10.00	Bowser, J. K., R. No. 1, Cowansville. Possessing deer in close season	100.00
Sewell, Luther L., 2913 Wylie Avenue, Pittsburgh 19. Hunting game in a special dog training area	25.00	Branthoover, Foster S., 314 4th St., Apollo. Hunting without license	20.00
Shaffer, Anthony, 179 Liberty St., Birdsville. Transporting untagged deer	25.00	Buzzard, Dewey G., Mahoning. Hunting without resident license	20.00
Shelton, Menzo Noe, Box No. 99 Cuddy. Hunting without resident license	20.00	Crownover, Marlin R., Springs Church. Shooting at unprotected target in big game season	10.00
Sherrick, Thomas W., 223 Park Entrance Drive, Pittsburgh 16. Hunting without resident license	20.00	Cyktich, John, R. D. No. 5, Kittanning. Possessing doe deer in closed season	100.00
Shrewsbury, Clyde G., 3030 Ohio River Blvd., Avalon. Attempting to kill second wood duck	10.00	Ferkan, George D., R. D. No. 2, New Bethlehem. Hunting without resident license	20.00
Simpson, James B., 7629 Roslyn St., Pittsburgh 18. Failure to report killing bear within five days after close of season	2.00	Fisher, Chester J., R. D. No. 3, Dayton. Aiding in concealment of wild turkey taken in closed season	25.00
Smith, Edward John, Box 599, Pittsburgh 27. Hunting rabbits with shotgun containing more than 3 shells	10.00	Gaul, Julius, R. D. No. 1, Rural Valley. Possessing deer more than sixty days after the close of season	50.00
Smith, William F., R. D. 2, Tarentum. Killing one wood duck over limit	10.00	George, Duane H., R. D. No. 1, Kittanning. Hunting game after closing hour	15.00
Spalvieri, Ettore, Cuddy. Hunting rabbits with shotgun containing more than three (3) shells	10.00	Hartman, Charles R., Oak Ridge. Failure to post roster of party hunting big game	25.00
Spirk, Charles L., 50 Mathilda St., Millvale. Hunting wild ducks after closing hour	15.00	Kamody, Andrew, 1030 7th Avenue, Ford City. Assisting to conceal and transport four rabbits unlawfully killed	40.00
Staples King C., 2506 Bedford Ave., Pittsburgh. Possessing loaded rifle in vehicle in motion	25.00	Kamody, Edward, R. D. No. 1, Freeport. Assisting to conceal and transport game, four rabbits, unlawfully killed	40.00
Stauff, Robert R., 2325 Atmore St., Pittsburgh. Possessing loaded rifle in vehicle standing along highway	10.00	McGuire, Kenneth, Distant. Shooting within 150 yds. of occupied building	25.00
Stewart, Vincent E., 750½ Sixth St., Oakmont. Possessing loaded rifle in vehicle along highway	10.00	Neiswonger, William Carl, R. D. No. 2, Mayport. Shooting within 150 yds. of occupied building	25.00
Stromonski, Raymond F., 16 Ellen St., Glenshaw. Hunting in safety zone	25.00	Rumbaugh, Clair Frances, Box 282, Dayton. Hunting game between 5 P. M. and 7 A. M.	15.00
Suppers, William J., 916 Chestnut St., N. S. Pittsburgh. Hunting game prior to opening hour	15.00	Simon, Joseph Sr., Box 284, Yatesboro. Shooting within 150 yds. of an occupied building	25.00
Taylor, John Alfred, 827 5th Ave., McKeesport. Hunting small game in party of more than 5 persons	5.00	Slavka, Joseph J., 1024 7th Ave., Ford City. Assisting to conceal and transport game unlawfully killed	40.00
Taylor, Stephen E., 2235 Salisbury St., Pittsburgh. Hunting rabbits between 5 P. M. and 7 A. M.	15.00	Smith, Edwin S., Seminole. Hunting wild duck after closing hour	15.00
Taylor, Walter E., 6825 Adams Ave., Dravosburg. Hunting small game in party of more than 5 persons	5.00	Smith, James, E., Box 96, Seminole. Hunting ducks after closing hour	15.00
Thomas, Carl E., 4016 Home St., Terrace. Possessing two ducks over limit	20.00	Smith, Charles W., R. D. No. 2, Kittanning. Hunting ducks after closing hour	15.00
Thompson, Howard, W., R. D. No. 3, Aliquippa. Possessing loaded rifle in vehicle standing along highway	10.00	Toy, Eugene V., R. D. No. 5, Kittanning. Possessing doe deer in close season	100.00
Tissue, Harry, 68 Evans St., Pittsburgh 5. Killing ringneck hen pheasant in close season	25.00	Trout, Charles E., Sr., Sagamore. Possessing parts of deer in close season	100.00
Underwood, Harvey Turl, Apt. 34-D, Grand Ave., Pittsburgh 25. Hunting small game in a party of more than 5 persons	5.00	Turberville, J. A., Jr., Worthington. Failure to produce roster of party hunting big game	25.00
Underwood, Herman H., 2501 Spring St., Pittsburgh 10. Hunting small game in a party of more than 5 persons	5.00	Wise, Harold C., Oak Ridge. Hunting ducks with shotgun containing more than 3 shells	10.00
Villanowa, George S., 46 Wyoming St., Mt. Washington. Transporting parts of deer not tagged	25.00	BEAVER—\$520.00	
Vitale, Frank, 420 Chartiers Ave., Carnegie. Hunting rabbits with shotgun containing more than 3 shells	10.00	Bacic, Donald R., 492 3rd Ave., Koppel. Shooting at unprotected target in big game season	10.00
Vocke, Albert C., Buchanan Ave., Dravosburg. Hunting small game in party of more than 5 persons	5.00	Bova, Anthony A., 928 Ohioview Ave., Ambridge. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Vocke, Albert Joseph, 6907 Buchanan Ave., Dravosburg. Hunting small game in a party of more than 5 persons	5.00	Campbell, Joseph R., R. D. No. 2, Darlington. Hunting rabbits with shotgun containing more than 3 shells	10.00
Watson, Robert C., 266 Church Ave., Pittsburgh. Hunting without a resident license	20.00	Carlyly, Herman A., 116 Cedar Ave., Aliquippa. Hunting ducks with shotgun containing more than 3 shells	10.00
Wegener, Henry William, Box 304, Carnegie. Hunting without resident license	20.00	Chinchilla, David L., 2409 Beaver Rd., Ambridge. Hunting ducks after closing hour	15.00
Welsh, Thomas P., Box 382, R. D. No. 5, Crafton. Hunting without resident license	20.00	Chinchilla, Thomas, 2409 Beaver Rd., Ambridge. Hunting wild ducks after closing hour	15.00
Werner, William F., 504 Second St., Elizabeth. Hunting without a resident license	20.00	Clerici, Anthony, Box 42, New Galilee. Hunting without resident license	20.00
Westlock, Russell, Spring St., Carnegie. Hunting rabbits with shotgun containing more than 3 shells	10.00	Frenchel, Dale L., R. D. No. 1, Beaver Falls. Shooting at target more than 200 yds. from headquarters	10.00
Wilson, Elmer Ellsworth, 18-E Scott Drive, Dravosburg. Hunting game between 5 P. M. and 7 A. M.	15.00	Frederick, George, 1609 W. 9th St., Beaver Falls. Possessing loaded rifle in vehicle standing along highway	10.00
Wison, Frank A., 876 Miller Ave., Clairton. Shooting at and attempting to kill one pheasant in close season	25.00	Gibson, Ronald R., R. D. No. 1, Aliquippa. Hunting without resident license	20.00
		Gross, Harold Edward, Phillips St., Baden. Hunting without resident license	20.00
		Hazen, Ronald A., R. D. No. 2, Ellwood City. Hunting without resident license	20.00

Hooper, Marvin Ellsworth, 220 Lunmar Plan, Alliquippa. Possessing one rabbit over daily limit	10.00
Kolar, Thomas A., 818 18th St., Ambridge. Hunting without resident license	20.00
Manor, Mike, 134 Maplewood Ave., Ambridge. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
McCracken, Charles R., 823 3rd Ave., Freedom. Failure to tag deer before moving	10.00
Palyan, John J., 14 F Midland Heights, Midland. Hunting without resident license	20.00
Parish, Edward, R. D. No. 1, Aliquippa. Hunting raccoon on Sunday	25.00
Rich, Joseph A., 1072 Beaver Rd., Ambridge. Hunting ducks between 5 P. M. and 7 A. M.	15.00
Sabo, Andrew, 498 Lincoln Ave., Beaver. Hunting game in safety zone	25.00
Sandman, Bernard H., 101 Bridge St., Bridgewater. Hunting before 9 A. M. opening day; resisting arrest by an officer	115.00
Shannon, William I., 1716 W. 9th St., Beaver Falls. Possessing loaded rifle in vehicle standing along highway	10.00
Short, Robert Russell, 815 Maplewood Ave., Ambridge. Possessing ringneck pheasant hen in closed season	25.00
Streett, Elmer Victor, R. D. No. 1, Clinton. Possessing hen pheasant	25.00
Theodore, George, 131 Merchant St., Ambridge. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Weher, William H., 286 Baden St., Baden. Hunting wild ducks after closing hour	15.00

BEDFORD—\$535.00

Childers, Chester C., Six Mile Run. Possessing loaded rifle in vehicle standing along highway	10.00
Clark, Donald W., R. D. No. 3, Everett. Failure to produce roster of party hunting big game	25.00
Clark, Warren G., R. D. No. 2, Everett. Failure to produce roster of party hunting big game	25.00
Findley, Gerald William, R. D. No. 2, Everett. Possessing loaded rifle in vehicle standing on highway	10.00
Hafer, Jesse Martin, R. D. No. 3, Bedford. Possessing parts of deer killed in closed season	100.00
Lane, Dewey, Sproul. Training dogs on raccoons after midnight .	10.00
Mellott, Douglas, Everett. Hunting game between 5 P. M. and 7 A. M.	15.00
Miller, Clair Eugene, R. D. No. 1, Schellsburg. Assisting to kill deer in closed season	100.00
Miller, Gerald R., 600 N. Spring St., Everett. Possessing loaded rifle in motion on highway	25.00
Miller, Kenneth H., R. D. No. 2, Clearville. Hunting while hunting rights have been denied; possessing loaded rifle in vehicle in motion on highway	65.00
Mock, John I., Woodbury. Shooting within 150 yds. of occupied building	25.00
Showalter, William Boyd, R. D. No. 1, Everett. Hunting small game in party of more than 5 persons	5.00
Stuckey, John Herbert, 324 S. Bedford St., Bedford. Possessing two grey squirrels over daily limit	20.00
Woe, James Warren, R. D., Everett. Possessing deer taken in closed season	100.00

BERKS—\$1,065.00

Albright, John Addison, Carsonia and Melrose Aves., Stony Creek Mills. Shooting within 150 yards of occupied building	25.00
Arndt, Melvin C., R. D. No. 1, Lenhartsville. Killing a hen pheasant	25.00
Bauer, Gerald Wilmer, Bechtelsville. Hunting within 150 yds. of occupied building	25.00
Bingaman, James P., Holland St., Shillington. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Bucci, Nicholas W., 203 Furnace St., Birdsboro. Failure to report shooting accident injury to another	25.00
Bukowski, Anthony Joseph, 419 S. 7th St., Reading. Shooting within 150 yards of occupied building	25.00
Dugan, Thomas W., 934 Moss St., Reading. Hunting on special dog training area	25.00
Eager, Raymond T., R. D. No. 2, Mohnton. Possessing loaded rifle in vehicle standing along highway	10.00
Fisher, Robert A., R. D. No. 1, Hamburg. Killing a skunk from motor vehicle	10.00
Fletcher, James J., 1801 Perkiomen Ave., Reading. Possessing hen pheasant	25.00
Gabel, Robert L., 1013 N. 5th St., Reading. Failure to show hunter's license to landowner on demand	20.00
Garber, Paul Warren, Leesport. Entering an Auxiliary State Game Land in open season	25.00
Gearhart, Gilbert C., 22-37th AFRTC, Reading. Hunting rabbits with a shotgun containing more than 3 shells	10.00
Haas, Richard Allen, R. D. No. 1, Stony Creek Mills. Setting steel trap closer than five feet from hole	10.00
Heller, Richard Joseph, 808 N. 9th St., Reading. Hunting on special dog training area	25.00
Hern, Robert W., R. D. No. 1, Hamburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Huber, Howard Nelson, Hereford. Hunting small game in party of more than five persons	5.00
Hummel, Jr., Wayne J., Bethel. Setting steel trap closer than 5 feet from hole	10.00
Kachel, Marvin I., R. D. No. 1, Mohnton. Possessing loaded rifle in vehicle standing along highway	10.00
Kantner, Lester N., R. D. No. 1, West Leesport. Possessing loaded rifle in vehicle standing along highway	10.00
Katz, Richard M., R. D. No. 2, Bernville. Hunting without resident license	20.00
Keener, Thomas C., 153 Franklin St., Fleetwood. Lending hunting license and tag to another	20.00
Kercher, Ambrose I., Esterly. Hunting without resident license .	20.00
Kern, Jr., Paul A., Douglasville. Shooting within 150 yds. of occupied bldg.	25.00

Kiehl, James E., 50 Hendel St., Shillington. Shooting upon lands of Wernersville State Hospital	25.00
Kline, Eugene M., R. D. No. 1, Womelsdorf. Killing ringneck pheasant hen	25.00
Lacey, John C., R. D. No. 1, Birdsboro. Failure to display license tag while hunting	20.00
Long, Chester L., 10 Park Lane, Pennside, Reading. Attempting to transport ringneck cockbird out of state	25.00
Lutz, Richard D., 326 Main St., Birdsboro. Failure to tag one trap	10.00
Moyer, Grant Rohrbach, Bechtelsville. Hunting within 150 yards of occupied building	25.00
Nace, Jr., D. H., 325 Main St., Kutztown. Killing a rabbit between the hours of 5 P. M. and 7 A. M.	15.00
Orrs, George W., 531 Goodhart Courts, Reading. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Phillips, Arthur I., 633 Ritter St., Reading. Shooting across highway while hunting game	25.00
Phillips, Herbert F., 1302 Margaret St., Laureldale. Hunting between the hours of 5 P. M. and 7 A. M.	15.00
Quirion, Paul J., Barto. Hunting game before opening hour first day	15.00
Reeser, Franklin P., 628 Brookline St., Reading. Hunting game between 5 P. M. and 7 A. M.	15.00
Reich, George D., Jr., Stony Creek Mills. Failure to maintain complete roster of party hunting big game	25.00
Rentschler, Harlan K., 916 Robinson St., Reading. Possessing loaded shotgun in vehicle in motion on highway	25.00
Schnader, Edwin D., 35 S. Wyomissing Ave., Shillington. Hunting game between 5 P. M. and 7 A. M.	15.00
Seldel, Donald F., Box 13, Birdsboro. Setting steel trap closer than 5 feet from hole	10.00
Sheeler, Jr., Russell M., R. D. No. 2, Boyertown. Possessing loaded rifle in vehicle in motion on public highway	25.00
Shirey, George D., R. D. No. 2, Boyertown. Possessing skin of furbearing animals (5 skunk) in closed season	50.00
Shirk, Clarence P., R. D. No. 31, Bernville. Failure to display license while hunting	20.00
Spohn, Charles J., 1014 Green St., Reading. Shooting within 150 yds. of occupied building	25.00
Stahl, Russell R., Bally. Hunting within 150 yards of occupied building; hunting small game with shotgun containing more than three shells	35.00
Staley, Ray L., 284 W. Elm St., Reading. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Varney, Patsy Ralph, 202 S. Water St., Birdsboro. Setting steel trap closer than 5 feet from hole	10.00
Volpiccini, Nicholas W., 103 River Rd., Birdsboro. Failure to report shooting accident causing injury to himself	25.00
Weisner, Harold G., R. D. No. 2, Kutztown. Failure to visit trap within 36 hrs.	10.00
Wink, Robert John, R. D. No. 2, Fleetwood. Entering Auxiliary State Game Refuge with firearms	25.00
Wishnieski, Anthony, 635 Summit Ave., Reading. Shooting within 150 yds. of occupied building	25.00
Wolfe, Verling H., Bechtel. Failure to tag one trap	10.00
Zimmerman, Clarence M., R. D. No. 2, Boyertown. Possessing loaded shotgun in vehicle standing along highway	10.00

BLAIR—\$905.00

Aungst, Harold Clair, R. D. No. 1, Hollidaysburg. Entering safety zone (within 150 yds. of occupied building)	25.00
Butler, Donald E., R. D., Roaring Spring. Possessing deer taken in closed season	100.00
Claar, Wilfred C., R. D. No. 1, Box 204, Roaring Spring. Entering safety zone (within 150 yds. of occupied building)	25.00
Copeland, Barbara S., 2632 7th Ave., Altoona. Hunting without resident license	20.00
Day, James D., 2606 Broad Ave., Altoona. Hunting without resident license	20.00
Dilling, Edgar L., R. D. No. 1, Williamsburg. Using an automobile to hunt rabbits (1 day)	50.00
Dodson, Elwood J., R. D. No. 1, Box 208, Roaring Spring. Entering safety zone (within 150 yards of occupied building) .	25.00
Dunn, James M., 2905 1st St., Altoona. Lending hunting license to another	20.00
Eger, George J., R. D. No. 1, Duncansville. Hunting without resident license	20.00
Eyster, Harold G., Jr., 732 Hudson Ave., Altoona. Hunting ringneck pheasants between 5 P. M. and 7 A. M.	15.00
Green, John W., 127 Manor Road, Altoona. Hunting without resident license	20.00
Knepp, Lindsay L., 810 11th St., Altoona. Hunting without resident license	20.00
Kulmatycki, Alex, 1209 29th Ave., Altoona. Transporting a deer not tagged	25.00
Lingenfelter, Michael I., 209 Mulberry St., Hollidaysburg. Hunting small game in party of more than 5 persons	5.00
Miller, Elwood T., 517 Spruce St., Hollidaysburg. Hunting small game in a party of more than five persons	5.00
Miller, Walter, S., R. D. No. 2, Hollidaysburg. Hunting small game in party of more than 5 persons	5.00
Myers, George E., 99 A Lake Ave., Lakemont. Hunting between the hours of 5 P. M. and 7 A. M. for small game	15.00
Pielmeier, Daniel F., 1212 2nd Ave., Altoona. Killing grouse in closed season	25.00
Reese, Arthur C., R. D. No. 3, Gen. Del., Altoona. Possessing deer taken in closed season	100.00
Ripka, Roy C., R. D. No. 1, Hollidaysburg. Hunting small game in party of more than 5 persons	5.00
Ritchey, Theodore, R. D. No. 2, Hollidaysburg. Hunting small game in party of more than 5 persons	5.00
Rupeka, Michael A., R. D. No. 2, Williamsburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Salvards, John J., 308 Garber St., Hollidaysburg. Hunting between the hours of 5 P. M. and 7 A. M. for small game	15.00
Schmidhamer, Lewis C., 713 3rd Ave., Altoona. Shooting within 150 yds. of occupied building	25.00
Shultz, Clyde Robert, R. D. No. 1, Williamsburg. Using an automobile to hunt for rabbits (1 day)	50.00

Singer, Floyd, 316 Lexington Ave., Altoona. Shooting within 150 yds. of occupied building	25.00
Smith, Glen Arnold, R. D., Roaring Spring. Possessing deer taken in closed season	100.00
Steele, Asbury C., R. D. No. 1, Altoona. Failure to produce roster of party hunting big game	25.00
Stine, Andrew S., 213 Locust St., Roaring Spring. Killing a ringneck pheasant hen	25.00
Thompson, Alton C., 613 New St., Roaring Spring. Hunting in safety zone	25.00
Wertz, Collins M., R. D. No. 1, Box 201, Roaring Spring. Entering safety zone (within 150 yds. of occupied building)	25.00
Zera, John J., R. D. No. 2, Bedford. Hunting rabbits with shotgun containing more than 3 shells; hunting small game in party of more than 5 persons	15.00

BRADFORD—\$211.00

Coolbaugh, Raymond L., 223 Chestnut St., Athens. Shooting at random in big game season	10.00
DeSisti, Louis, 104 E. Lockhart, Sayre. Hunting pheasants with shotgun containing more than 3 shells	25.00
Homan, George F., R. D. No. 5, Towanda. Possessing loaded shotgun in vehicle standing on highway	10.00
Krotzer, William M., 229 South St., Athens. Possessing two squirrels over daily limit	20.00
Lent, Donald E., R. D. No. 5, Towanda. Possessing loaded rifle in vehicle moving on highway	25.00
Mulcahey, Edward Paul, R. D. No. 3, Towanda. Killing male deer not having two points to one antler	100.00
Page, Wilfred, 111 N. River St., Sayre. Possessing two squirrels over daily limit	20.00
Vanderpool, Fred, R. D. No. 6, Towanda. Failure to sign hunter's license	1.00

BUCKS—\$425.00

Beets, John C., 2704 Orchard Ave., Croydon. Hunting wild ducks after official closing hour	15.00
Bousfield, John Kingsmill, R. D. No. 1, Perkaspie. Hunting without resident license	20.00
Comley, Thomas, 913 W. Penn Ave., Morrisville. Hunting game after closing hour	15.00
Delke, Edward H., R. D. No. 1, Newtown. Hunting game before 7 A. M.	15.00
Dempsey, James B., 94 East St., Doylestown. Possessing loaded rifle in vehicle standing on highway	10.00
Dunham, Robert, R. D. No. 2, Buckingham Way, Morrisville. Hunting game after closing hour	15.00
Fehrle, John William, Birch and Chestnut Sts., R. No. 1, Langhorne. Shooting within 150 yds. of occupied building	25.00
Gerhart, Ernest L., Box 42, Milford Square. Possessing loaded shotgun in vehicle standing along highway	10.00
Gumbert, Arthur H., Wycombe. Hunting without resident license	20.00
Hager, Edwin A., 163 Washington St., Doylestown. Hunting game between 5 P. M. and 7 A. M.	15.00
Hobson, Joseph V., R. D. No. 1, Pipersville. Hunting without resident license	20.00
Kosik, Steve, R. D. No. 1, Hellertown. Possessing loaded rifle in vehicle in motion on highway	25.00
Lambert, Richard, West and Union Sts., Doylestown. Hunting game between 5 P. M. and 7 A. M.	15.00
Lewis, Jr., Raymond Lamar, R. D. No. 3, Quakertown. Hunting game between 5 P. M. and 7 A. M.	15.00
Michalski, John E., 2060 Lincoln Ave., Croydon. Hunting without resident license	20.00
Purnell, Ernest W., Farm School. Hunting without resident license	20.00
Ring, Harvey E., R. D. No. 1, Kintnersville. Hunting without resident license	20.00
Rose, Gerald J., Easton Rd., Neshaminy. Shooting at unprotected target in big game season	10.00
Tomlinson, Harry J., 546 N. Penn Ave., Morrisville. Using a boat with motor attached for hunting ducks	50.00
Wagner, Harley, R. D. No. 2, Quakertown. Hunting without resident license	20.00
Willey, Virgil W., 304 Washington Ave., Newtown. Hunting game before 7 A. M.	15.00
Williams, Jr., Chester Garfield, 1317 W. Broad St., Quakertown. Hunting without resident license	20.00

BUTLER—\$940.00

Bier, Emil J., R. D. No. 1, Mars. Possessing live raccoon without permit	25.00
Bohlman, William E., Elizabeth St., Evans City. Hunting on special dog training area	25.00
Crookroft, Frank M., R. D. No. 2, Butler. Throwing light upon deer while in possession of firearms	100.00
Day, Regis H., R. D. No. 1, Petrolia. Hunting within 150 yds. of occupied bldg.	25.00
Emerick, Harold E., Box 146, Bruin. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
Emery, Arthur C., 340 W. Diamond St., Butler. Shooting into live tree in big game season	10.00
Flach, Charles F., R. D. No. 1, Zellenople. Hunting without resident license	20.00
Gilliland, Robert L., 245½ E. Jefferson St., Butler. Shooting into live tree in big game season	10.00
Greenawalt, Clair D., R. D. No. 1, Zellenople. Hunting on special dog training area	25.00
Greenawalt, Omar, C., R. D. No. 1, Zellenople. Hunting on special dog training area	25.00
Hayes, Ralph W., R. D. No. 5, Butler. Disturbing wild birds or animals in safety zone	25.00
Pennington, Frederick, Parkers Landing. Hunting game without hunting license	20.00
Rape, Mary L., Box 252, Evans City. Hunting on special dog training area	25.00
Rape, Lonnie A., Box 252, Evans City. Hunting on special dog training area	25.00

Ruth, Charles L., Eau Clair. Hunting game on Sunday	25.00
Saul, Craig, B., R. D. No. 5, Butler. Hunting ducks between 5 P. M. and 7 A. M.	15.00
Schoffel, Ronald L., 121 E. Main St., Evans City. Hunting game after shooting hour	15.00
Sheakley, Loyd E., Box 38, Petrolia. Hunting within 150 yds. of occupied dwelling	25.00
Shever, Raymond A., R. D. No. 2, Evans City. Attempting to kill a second deer in one season; assisting in killing male deer not having 2 points to one antler	200.00
Smith, Gerald W., R. D. No. 1, Boyers. Possessing loaded rifle in vehicle in motion on highway	25.00
Ufner, Mitchell, 7 Main St., Lyndora. Failure to display license tag while hunting	20.00
Weiland, Clifford, R. D. No. 2, Butler. Shooting ducks after closing time	15.00
Weir, Robert L., Grandview Ave., Zellenople. Attempting to kill second deer in one season; killing a spike buck in closed season	200.00
Williams, George A., East Butler. Disturbing wild birds in safety zone	25.00

CAMBRIA—\$785.00

Ager, Stanton J., Nicktown. Killing grouse in closed season ..	25.00
Bender, Steve, 298 Sterling Ave., Nanty Glo. Possessing protected bird ..	10.00
Billetdeaux, Vincent DePaul, 884 Wm. Penn Highway, Cresson. Hunting on State Hospital Grounds	25.00
Bradley, Ira L., Mountain House Grounds, Cresson. Hunting small game in party of more than 5 persons	5.00
Bradley, Jerome J., Mountain House Grounds, Cresson. Hunting small game in party of more than 5 persons	5.00
Bradley, Joseph P., Mountain House Grounds, Cresson. Hunting small game in party of more than 5 persons	5.00
Bradley, Michael Bernard, Mountain House Grounds, Cresson. Hunting small game in party of more than 5 persons	5.00
Bradley, William F., Mountain House Grounds, Cresson. Hunting small game in party of more than 5 persons	5.00
Campbell, Walter P., 1405 Meecher Blvd., Johnstown. Shooting at crow from a vehicle	10.00
Carr, David G., 1358 Hope Street, Johnstown. Hunting without resident license	20.00
Degol, Leno, 432 Tunnel Hill St., Gallitzin. Hunting rabbits between 5 P. M. and 7 A. M. using artificial lights to take rabbits	25.00
Eckenrode, Walter C., Mountain House Grounds, Cresson. Hunting small game in party of more than 5 persons	5.00
Ehrig, Richard W., 730 Bloom St., Johnstown. Possessing loaded rifle in vehicle standing along highway	10.00
Elory, Allen W., Spangler. Shooting within 150 yds. of occupied building	25.00
Forsythe, John, R. D. No. 2, Portage. Possessing ringneck pheasant taken in closed season	25.00
Girolami, Carlo, Colver. Hunting game within 150 yds. of occupied building	25.00
Gresh, Michael, R. D. No. 2, Ebensburg. Failure to maintain complete roster of party hunting big game	25.00
Hall, Gary G., R. D. No. 2, Portage. Hunting without resident license	20.00
Hammer, Ross B., 222 David St., Johnstown. Possessing 7 grey squirrels over two days limit	70.00
Helmick, Marlin W., 102 Erie St., Johnstown. Hunting game prior to opening hour first day	15.00
Kehn, Robert, R. D., South Fork. Hunting, pursuing or disturbing wild birds and animals in safety zone	25.00
Kinnel, Charles F., 305 Strayer St., Johnstown. Killing one grouse in closed season	25.00
Lewis, Chester, R. D. No. 2, Portage. Possession of one ringneck pheasant taken in closed season	25.00
Lint, William F., 541 Oakland Ave., Johnstown. Possessing a hen pheasant	25.00
Logue, Melvin A., 145 Blough St., Johnstown. Possessing 2 grey squirrels over daily bag limit	20.00
Lundberg, Raymond, Lilly Road, Cresson. Discharging firearm within 150 yds. of occupied building	25.00
Miller, Eligah H., 973 Franklin St., Johnstown. Hunting without resident license	20.00
Moody, Tomulyss, R. D. No. 1, Conemaugh. Borrowing hunting license and tag of another	20.00
Nelen, Marlinus R., R. D. No. 2, Ebensburg. Possessing loaded shotgun in vehicle in motion on highway	25.00
Penrod, Foster M., 1117 Scapl Ave., Johnstown. Possessing 10 grey squirrel over 2 days bag limit	100.00
Plummer, Ralph Ross, Box 88, Claysburg. Possessing loaded gun in vehicle standing along highway	10.00
Ressler, Wilbur Aaron, R-3, Box 78B, Johnstown. Possessing 1 grouse in closed season	25.00
Rorabaugh, Donald D., 167 Jackson St., Conemaugh. Possessing 1 grey squirrel over daily bag limit	10.00
Saylor, Donald R., 535 Cyphress St., Johnstown. Possessing one grouse taken in closed season	25.00
Sentelik, Joseph, Beaverdale. Possessing loaded rifle in vehicle standing on highway	10.00
Wallace, William A., 339 Walters Ave., Johnstown. Possessing one grouse in closed season	25.00
Weyant, William Pershing, Jr., 110 Packer St., Johnstown. Possessing a protected bird	10.00

CAMERON—\$410.00

Bernard, Erskine, R. D. No. 1, Emporium. Possessing parts of deer in closed season	100.00
Foster, J. R., R. D. No. 1, Austin. Shooting at and attempting to kill a deer in closed season	100.00
Kreig, Alvin, R. D. No. 1, Emporium. Possessing parts of deer taken in closed season	100.00
Lambert, Robert L., Box 426, Emporium. Killing a deer in closed season	100.00
Stewart, J. E., Cameron. Failure to tag deer within one hour after killing	10.00

CARBON—\$810.00

Barron, George A., 114 Main St., Eckley. Failure to report shooting accident causing injury to himself	25.00
Bomba, Paul Robert, Canal St., Bowmanstown. Failure to display license tag while hunting	20.00
Bubick, Joseph, R. D. No. 2, Lehigh. Hunting deer in closed season	100.00
Cerisini, Nicholas, 212 W. Kline St., Lansford. Possessing grouse taken in closed season	25.00
Choley, Michael, 566 E. Railroad St., Nesquehoning. Failure to display license tag while hunting	20.00
Dolinsky, George, R. D. No. 2, Lehigh. Hunting deer in closed season	100 days
Kelper, Lawrence G., Albrightsville. Possessing deer taken in closed season	100.00
Lawrence, Patrick P., 435 E. Ridge St., Lansford. Transporting game unlawfully killed	25.00
Mermom, Andrew Simon, Sr., R. D. No. 2, Lehigh. Possessing parts of deer taken in closed season	100.00
Nagy, Frank Joseph, 432 Lehigh Ave., Palmerton. Shooting and wounding a human being in mistake for a wild duck ..	200.00
Rippert, Thomas A., Jr., Parryville. Failure to stop motor vehicle upon signal of Game Protector	10.00
Sabolchick, Joseph E., 45 Penrose St., Beaver Meadow. Hunting and disturbing game in safety zone	25.00
Schoch, Harold, Fireline Road, Parryville. Throwing artificial light upon deer while in possession of firearm; possessing loaded rifle in vehicle in motion on highway	125.00
Trentley, Jerome, 312 N. 3rd St., Lehigh. Permitting dog to enter Auxiliary State Game Refuge	25.00
Yeager, Samuel E., 245 Nice St., Frackville. Possessing loaded rifle in a vehicle standing on highway	10.00

CENTRE—\$920.00

Baney, George A., R. D. No. 2, Bellefonte. Possessing loaded shotgun in vehicle in motion on highway	25.00
Brown, George W., Box 738, Phillipsburg. Shooting at unprotected target in big game season	10.00
Confer, Albert O., 247½ N. Spring Ave., Bellefonte. Dog chasing deer	25.00
Flick, James B., Fleming. Possessing loaded rifle in vehicle in motion on highway	25.00
Fulton, George H., 330 E. College Ave., State College. Possessing parts of deer taken in closed season	100.00
Gates, Benjamin F., Pleasant Gap. Hunting without resident hunting license	20.00
Gordon, George E., R. D. No. 3, Bellefonte. Hunting rabbits prior to opening hour first day	15.00
Hall, Charles L., Fleming. Possessing loaded rifle in vehicle in motion on highway	25.00
Hall, Lala M., Fleming. Possessing loaded shotgun in vehicle in motion on highway	25.00
Hamilton, Robert D., R. D., Port Matilda. Possessing parts of deer taken in closed season	100.00
Hastings, Carl M., Centre Hall. Possessing loaded shotgun in vehicle in motion on highway	25.00
Kachik, Mike J., Moshannon. Killing rabbit between 5 P. M. and 7 A. M.; shooting within 150 yds. of occupied building ..	40.00
Korman, Kermit M., Cherry Alley, Bellefonte. Killing one grouse in closed season; attempting to kill one grouse in closed season	50.00
Linguist, Torrence R., Pleasant Gap. Killing doe deer in closed season	100.00
Lowe, Theodore H., 133 W. Fairmont Ave., State College. Throwing artificial light upon deer while in possession of firearms ..	100.00
Pardee, Clarence E., Box 554, Bellefonte. Hunting, pursuing and disturbing game animals in safety zone	25.00
Robinson, Kenneth W., R. D. No. 3, Bellefonte. Transporting untagged deer	25.00
Schnars, John R., R. D., Julian. Possessing loaded rifle in vehicle in motion on highway	25.00
Smith, Earl W., R. D. No. 2, Bellefonte. Transporting parts of deer untagged	25.00
Todd, Henry W., Jr., 114 Presqueisle St., Phillipsburg. Shooting at unprotected target in big game season	10.00
Yarnell, David H., Pleasant Gap. Possessing deer in closed season	100.00
Young, Raymond M., R. D. No. 1, Howard. Shooting within 150 yds. of occupied building	25.00

CHESTER—\$1,175.00

Alexander, Harry Walter, R. D. No. 4, Coatesville. Shooting within 150 yds. of occupied building	25.00
Arnold, Deward William, Valley Forge General Hospital, Phoenixville. Shooting within 150 yds. of occupied building ..	25.00
Bitler, Russell S., R. D. No. 1, Elverson. Possessing loaded rifle in vehicle used as blind to kill game	25.00
Bodolus, Jr., Stephen Eugene, R. D. No. 1, Pottstown. Possessing a loaded shotgun in a vehicle, standing along public highway ..	10.00
Brewer, Ernest W., R. D., Cochranville. Possessing a loaded rifle in vehicle in motion on highway	25.00
Britton, Franklin E., Honey Brook. Hunting deer on State Game Propagation Area	25.00
Brown, James L., R. D. No. 2, Newton Square. Failure to display license tag while hunting	20.00
Bush, Charles W., R. D. No. 1, Cochranville. Hunting without resident license	20.00
Cole, Clarence E., 827 So. First Ave., Coatesville. Hunting game between 5 P. M. and 7 A. M.	15.00
Eller, Harry G., Avondale. Failure to stop on signal of Game Protector	10.00
Forges, Roy S., R. D. No. 1, Spring City. Entering an auxiliary state game refuge in open season	25.00
Franklin, Carl, Chatham. Shooting at game across highway	25.00
Gaugler, Clarence D., R. D. No. 2, Oxford. Attempting to transport one rabbit out of state	10.00
Givler, Horace G., Thorndale. Hunting without a resident license	20.00

Harris, Raymond D., Honeybrook. Hunting game prior to opening hour first day	15.00
Jones, Robert, Box 16, Pomeroy. Assisting to conceal doe deer killed in closed season	100.00
Kellon, Allen C. Hunting on Special Wildlife Refuge	25.00
Leike, Paul Moyer, 117 Strode Ave., Coatesville. Shooting within 150 yds. of occupied building; failure to display hunting license tag while hunting	45.00
McAfee, Everett J., Star Route, Pottstown. Hunting deer between the hours of 5 P. M. and 7 A. M.	15.00
McAfee, William Ralston, Star Route, Pottstown. Hunting deer between the hours of 5 P. M. and 7 A. M.	15.00
McLain, Walter Lee, Lincoln, University. Hunting rabbits with shotgun containing more than 3 shells	10.00
Miller, Raymond Ronald, R. D. No. 1, Pottstown. Setting one trap prior to the opening hour for furbearers	10.00
Miller, Whitmer R., R. D. No. 1, Cochranville. Hunting without resident license	20.00
Moore, Harry A., R. D. No. 2, Pottstown. Hunting without resident license	20.00
Mower, Edna A., 120 Cedar St., Spring City. Hunting, pursuing or disturbing wild game in safety zone	25.00
Nickodemski, Walter E., 24 W. 5th Ave., Coatesville. Shooting within 150 yds. of occupied building	25.00
Phillips, Robert, R. D. No. 2, Honeybrook. Possessing 4 muskrat skins during the closed season	40.00
Porter, Clarence F., R. D. No. 2, Pottstown. Failure to report shooting accident causing injury to himself	25.00
Ranek, Urban E., Honey Brook. Hunting deer on State Game Propagation Area	25.00
Rissel, Charles G., R. D. No. 2, Coatesville. Possessing hen pheasant	25.00
Robinson, Delmar W., R. D. No. 1, Glenmoore. Hunting game prior to the opening hour first day	15.00
Rubican, Harold J., R. D. No. 1, Coatesville. Possessing a loaded shotgun in vehicle in motion on highway	25.00
Sargent, Denis, R. D. No. 1, Glenmoore. Hunting without a resident hunter's license	20.00
Sauders, James Calvert, Avondale. Entering an auxiliary State Game Refuge with gun in open season; killing a protected bird ..	35.00
Schwartz, William, R. D. No. 2, Downingtown. Possessing loaded rifle in vehicle in motion on highway	25.00
Simmons, Robert Morton, 54 W. 5th Ave., Coatesville. Shooting within 150 yds. of occupied building	25.00
Simmons, Floyd, R. D. No. 4, West Chester. Killing 2 grey squirrel in closed season	20.00
Skora, Adolph John, Phoenixville. Hunting within 150 yds. of occupied building	25.00
Spetts, George L., Elverson. Hunting deer on State Game Propagation Area	25.00
Stern, Earl L., Creek Road, Downingtown. Possessing loaded rifle in vehicle on highway in motion	25.00
Stoltzfus, David L., R. D. No. 1, Honeybrook. Hunting without a resident hunter's license	20.00
Stoltzfus, Elmer S., R. D. No. 1, Honeybrook. Hunting without resident license	20.00
Stoltzfus, Emanuel F., R. D. No. 2, Honeybrook. Hunting without resident license	20.00
Stoltzfus, Stephen B., R. D. No. 1, Honeybrook. Hunting without resident license	20.00
Walker, Robert N., 616 W. Chestnut St., West Chester. Disturbing, chasing wild birds in safety zone	25.00
Weaver, John Richard, 343 Charles St., Coatesville. Shooting within 150 yds. of occupied building	25.00
Wentzel, David, R. D. No. 2, Pottstown. Failure to report shooting accident causing injury to another	25.00
Wert, Robert P., Honeybrook. Hunting game prior to opening hour first day	15.00
Wilson, George K., R. D. No. 1, Downingtown. Hunting without a resident license	20.00
Yiaski, Joseph J., 19 E. Morgan St., Phoenixville. Hunting within 150 yds. of occupied building	25.00

CLARION—\$2,099.00

Best, Arthur R., R. D. No. 1, Clarion. Hunting game between 5 P. M. and 7 A. M.	15.00
Black, Sr., John, R. D. No. 2, Shippensburg. Possessing parts of deer taken in closed season	98.00
Boyd, Leland D., St. Petersburg. Possessing two pheasant hens ..	50.00
Carrube, Rudolph A., R. D. No. 2, Knox. Shooting at unprotected target in big game season	10.00
Cassaboon, Francis E., R. D. No. 2, Shippensburg. Failure to stop vehicle upon signal of Game Protector	10.00
Confer, Kenneth, Tionesta, R. D. Assisting in killing deer in closed season	100.00
Cope, Walter, E., Tionesta, R. D. No. 1. Failure to report deer killed for damage	100.00
DeLoe, Vern L., R. D. No. 2, Knox. Hunting without resident license	20.00
Detrich, Simon C., Venus. Killing 5 deer in closed season; killing a deer in closed season	600.00
Elder, Arnold G., R. D. No. 1, Parkers Landing. Hunting game prior to opening hour	15.00
George, Byron E., Strattonville. Shooting at unprotected target in big game season	10.00
Harmon, Arthur R., R. D., Tionesta. Killing deer in closed season	100.00
McKissick, Carm E., Strobenton. Possessing parts of illegal deer	100.00
Mealy, Kenneth E., Tionesta, R. D. Possessing parts of illegal deer ..	100.00
Mealy, Frank E., Tionesta, R. D. Possessing parts of illegal deer ..	100.00
Niederriter, Joseph F., Marble. Hunting without resident license ..	20.00
Ochs, Charles Henry, Lucinda. Hunting deer in closed season ..	100.00
Ochs, Wilfred A., Lucinda. Killing deer in closed season	100.00
Schmidt, Jr., Joseph P., R. D. No. 1, Venus. Possessing loaded rifle in vehicle in motion on highway; throwing artificial light on deer while in possession of firearm	128 days
Settz, Raymond L., Lucinda. Hunting deer in closed season ..	100.00
Slaker, William D., Tionesta, R. D. Assisting in killing deer in closed season	100.00

Swartz, James L., Sligo. Taking a gray fox from trap of another .	25.00
Thompson, Glenn T., Star Route, Marble. Setting two box traps to take rabbits	20.00
Walker, Paul R., R. D. No. 2, Clarion. Hunting between 5 P. M. and 7 A. M.	14 days, 6.00
Weaver, John W., Marble. Killing bear less than one year old	200.00

CLEARFIELD—\$1,655.00

Behun, John, R. D., Houtzdale. Attempting to kill ringneck hen	25.00
Behun, Michael, R. D. No. 1, Houtzdale. Attempting to kill ringneck hen	25.00
Bell, Jack S., R. D. No. 1, Morrisdale. Failure to display license tag while hunting	20.00
Boal, Lynn W., 414 Turnpike Ave., Clearfield. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Boyce, William C., 1204 Turnpike Ave., Clearfield. Hunting game prior to opening hour first day	15.00
Bryon, Thomas A., 528 S. Third St., Clearfield. Hunting game prior to opening hour first day	15.00
Bumbarger, Melvin C., RD, Woodland. Failure to display license tag while hunting	20.00
Conaway, Walter A., R. D. No. 2, Clearfield. Digging out woodchuck without required consent	10.00
Cooper, Wade M., 804 DuBois St., DuBois. Failure to tag deer within one hour after killing	10.00
Curry, Melvin T., 801 Mill Road, Clearfield. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Davis, Howard W., 506 Polk St., Clearfield. Possessing loaded rifle in vehicle standing along highway	10.00
DeGeorge, Angelo, R. D. No. 1, DuBois. Shooting within 150 yds. of occupied building	25.00
Dillon, Clair, Box 87, Winburne. Shooting within 150 yds. of occupied building	25.00
Divins, Robert T., 215 Watson Ave., DuBois. Possessing loaded rifle in vehicle in motion on highway	25.00
Dixon, Donald, Jr., Karthaus. Possessing deer taken in close season	100.00
Duttry, Vernon D., R. D. No. 2, DuBois. Hunting without resident license	20.00
Garrier, Robert, Luthersburg. Failure to display license tag while hunting; hunting wild turkeys between 5 P. M. and 7 A. M.	35.00
Gourley, Clifford C., George St., Curwensville. Killing squirrel between 5 P. M. and 7 A. M.	15.00
Graham, Lester W., R. D. No. 1, Woodland. Possessing doe deer taken in closed season	100.00
Hendricks, Harold, Rockton. Throwing artificial light upon deer while in possession of firearm	100.00
Hoy, Nevin W., R. D. No. 1, Woodland. Possessing parts of deer taken in closed season	100.00
Johnson, Enguelli, Houtzdale. Attempting to kill a ringneck hen	25.00
Kolash, Joseph N., 915 W. Washington Ave., DuBois. Shooting within 150 yds. of occupied building	25.00
Lash, Francis M., 120 S. 5th St., Clearfield. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Lynch, Donald A., 334 W. 5th Ave., Clearfield. Failure to display license tag while hunting	20.00
McGee, Robert A., 812 Ogden Ave., Clearfield. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
McGroarty, Edward, Drifting. Possessing parts of two deer taken in closed season	200.00
McGroarty, Patrick G., Drifting. Killing doe deer in closed season	100.00
Moore, Willard, R. D. No. 1, Olanta. Possessing deer taken in closed season	25.00
Parsons, James J., Smoke Run. Shooting within 150 yds. of occupied building	25.00
Queen, Van Buran, Coalport. Failure to produce roster of party hunting big game	25.00
Refalskey, Joseph, Ginter. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Roy Anthony Jr., Luthersburg. Hunting while hunting rights were denied; making false statement to secure hunting license	60.00
Russell, Joseph D., R. D., Rockton. Possessing loaded rifle in vehicle in motion on highway	25.00
Sharpless, Albert H., Brisbin. Possessing loaded rifle in vehicle standing on highway	10.00
Smith, Herman L., LeContes Mills. Possessing parts of deer taken in closed season	100.00
Stonebreaker, Donald E., Morrisdale. Hunting wild turkeys between 5 P. M. and 7 A. M.	15.00
Stonebreaker, Merle R., West Decatur. Hunting turkeys between 5 P. M. and 7 A. M.	15.00
Temchack, John, Beccaria. Shooting within 150 yds. of occupied building	25.00
Undercoffer, Robert B., R. D. No. 1, Woodland. Assisting in concealment of deer unlawfully taken	100.00
Wisor, James A., West Decatur. Hunting turkeys between 5 P. M. and 7 A. M.	15.00

CLINTON—\$1,005.00

Elchenlaub, Charles C., 453 E. Church St., Lock Haven. Training dogs on game while carrying shotgun	10.00
Elsenhower, Stewart G., Salona. Shooting within 150 yards of occupied building	25.00
Eyer, Delbert W., McElhatten. Possessing loaded rifle in vehicle in motion on highway; Hunting without resident license	45.00
Garbrick, Richard G., R. D. No. 1, Mill Hall. Entering Auxiliary Game Refuge in open season	25.00
Goetz, James F., 209 Locust St., Renova. Killing deer in closed season	100.00
Harter, Ernest N., Avis. Using craft propelled by mechanical power to kill game; Possessing deer unlawfully taken	150.00
Johnson, Charles W., R. D., Logantown. Failure to maintain complete roster of party hunting big game	25.00
Karstetter, Robert, Logantown. Possessing parts of deer in closed season	100.00
Rossman, Ira C., Logantown. Killing deer in closed season	100.00
Shawver, Frank, Lamar. Possessing deer taken in closed season	100.00
Shawver, Nevin L., Lamar. Killing spike buck in closed season	100 days
Wagner, Clarence W., 119 Ninth St., Renova. Injuring livestock while hunting	25.00
Wheeler, George, Flemington. Possessing deer taken in closed season	100.00

Young, Calvin, Box 28, Renova. Possessing parts of deer in closed season	100.00
Young, Lloyd T., Box 105, Westport. Possessing parts of deer in closed season	100.00

COLUMBIA—\$210.00

Craig, Charles M., R. D. No. 1, Millville. Killing turkey hen in closed season	25.00
Ernst, Raymond J., 111 Howard St., Millville. Shooting at target more than 200 yds. from camp in big game season	10.00
Flick, Donald G., 101 E. 6th St., Bloomsburg. Hunting small game in party of more than 5 persons	5.00
Flick, Henry N., 101 E. 6th St., Bloomsburg. Hunting small game in party of more than 5 persons	5.00
Flick, Paul E., 101 E. 6th St., Bloomsburg. Hunting small game in party of more than 5 persons	5.00
Harvey, Allen R., R. D. No. 1, Bloomsburg. Hunting while hunting rights have been denied	40.00
Ikeler, Robert B., R. D. No. 2, Bloomsburg. Hunting small game in party of more than 5 persons	5.00
Kile, Harry Franklin, R. D. No. 4, Bloomsburg. Hunting small game in party of more than 5 persons	5.00
Kile, William J., R. D. No. 4, Bloomsburg. Hunting small game in party of more than 5 persons	5.00
Kreamer, Clayton C., R. D. No. 1, Bloomsburg. Possessing parts of deer in closed season	100.00
Travelpiece, Garner L., 221 Racely St., Berwick. Hunting small game in party of more than 5 persons	5.00

CUMBERLAND—\$840.00

Armstrong, Edward S., 401 Front St., W. Fairview. Hunting, pursuing or disturbing wild birds and animals in safety zone	50.00
Banks, Richard Dale, 204 Bosler Ave., Lemoyne. Possessing loaded shotgun in vehicle standing along highway	10.00
Barnes, Nancy L., 313 2nd St., W. Fairview. Hunting without resident license	20.00
Cohick, Robert A., R. D. No. 5, Carlisle. Hunting game prior to opening hour first day	15.00
Cohick, Paul Albert, Jr., R. D. No. 5, Carlisle. Hunting game prior to opening hour first day	15.00
Cummings, Raymond L., R. D. No. 2, Shippensburg. Transporting an illegal deer	100.00
Derick, Francis P., R. D. No. 1, Newburg. Shooting at and wounding a human being in mistake for a squirrel	50.00
Dietz, Charles W., R. D. No. 4, Mechanicsburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Dietz, Warren H., R. D. No. 4, Mechanicsburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Elicker, Eugene R., R. D. No. 4, Mechanicsburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Finkenbinder, Jay W., Carlisle. Shooting at unprotected target in big game season	10.00
Glass, Lewis T., 171 E. Penn St., Carlisle. Hunting wildlife on dog training area	25.00
Grimes, Daniel, R. D. No. 3, Carlisle. Hunting game prior to opening hour first day	15.00
Grossman, James Alpheus, 2167 Chest St., Camp Hill. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Gutshall, Ralph D., R. D. No. 1, Camp Hill. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Hinkle, Samuel E., 335 Perry St., Enola. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Houck, Paul W., Jr., 211 E. King St., Shippensburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Houck, Robert L., R. D. No. 3, Shippensburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Hurley, Herman B., 15 Corporation St., Newville. Shooting within 150 yds. of occupied building	25.00
Mellott, Melvin F., R. D. No. 5, Carlisle. Hunting game prior to opening hour first day	15.00
Mooney, Floyd L., R. D. No. 2, Shippensburg. Failure to tag deer within one hour after killing	10.00
Moses, Ralph C., 2714 Oak Ave., Altoona. Shooting within 150 yds. of occupied building	25.00
Murphy, Charles F., 1920 Columbus Ave., Camp Hill. Possessing loaded shotgun in vehicle in motion on highway	25.00
Myers, Dale J., R. D. No. 5, Carlisle. Hunting small game in party of more than five persons; hunting prior to opening hour first day	20.00
Myers, Frank B., R. D. No. 5, Carlisle. Hunting game prior to opening hour first day; hunting small game in party of more than five persons	20.00
Myers, George W., R. D. No. 1, Camp Hill. Possessing loaded shotgun in vehicle standing along highway	10.00
Nicholl, Robert L., 107 S. Enola Drive, Enola. Possessing one rabbit over daily limit	10.00
Noggle, Robert M., 20 Holly St., Holly Springs. Possessing two ringnecks	50.00
Rupp, Alfred E., Jr., 109 W. Louthier St., Carlisle. Hunting game between 5 P. M. and 7 A. M.	15.00
Rupp, Herbert R., 210 S. Market St., Mechanicsburg. Killing game between 5 P. M. and 7 A. M.	15.00
Seitz, Jr., William E., 224 Columbia Road, Enola. Hunting small game in party of more than five persons	5.00
Souders, Richard P., R. D. No. 4, Mechanicsburg. Hunting small game in party of more than five persons	5.00
Stewart, Clifford R., 105 W. Front St., W. Fairview. Failure to maintain complete roster of party hunting big game	25.00
Weibley, Clyde E., R. D. No. 5, Carlisle. Shooting at unprotected target in big game season	10.00
Wisman, Clarence B., 315 Market St., Lemoyne. Hunting small game in party of more than five persons	5.00
Wisman, Jr., Abram G., 1332 Brandt St., New Cumberland. Hunting small game in party of more than 5 persons	5.00
Whisler, Clair K., R. D. No. 1, Newburg. Hunting without a resident license	20.00
Wilson, Earl, R. D. No. 1, Camp Hill. Hunting without resident license	20.00
Vaughn, Donald S., Jr., Boiling Springs. Killing game on state game refuge; failure to display license tag while hunting	45.00

CRAWFORD—\$1,500.00

Bly, Arthur, Hydetown. Hunting ringneck pheasants after closing hour	25.00
Brown, Donald L., R. D. No. 3, Spartansburg. Assisting to transport parts of deer taken in closed season	100.00

Brown, Louis S., R. D. No. 3, Spartansburg. Assisting to transport parts of deer taken in closed season	100.00
Brown, Lawrence H., R. D. No. 3, Spartansburg. Assisting to conceal deer taken in closed season	100.00
Brown, Jesse E., R. D. No. 3, Spartansburg. Transporting parts of deer taken in closed season	100.00
Byham, William A., 894 Ernest Place, Meadville. Hunting ducks prior to opening hour	15.00
Daszynicz, John M., Spartansburg. Shooting within 150 yds. of occupied building	25.00
Galletta, Charles J., 728 Garden St., Titusville. Possessing part of black squirrel taken in closed season	10.00
Gipolo, George, R. D. No. 1, Townville. Training dogs on game while carrying rifle	10.00
Guillard, Zane, R. R. No. 1, Prospect. Hunting ducks between 5 P. M. and 7 A. M.	15.00
Gulick, Richard E., 609½ Chestnut St., Meadville. Shooting at ducks prior to opening hour	15.00
Hamilton, Frank M., 501 Pine St., Meadville. Shooting at ducks prior to opening hour	15.00
Hanson, Oliver E., Jr., 654 Madison Ave., Meadville. Killing a protected bird	10.00
Hickernell, Glenn W., Saegerstown. Failure to submit annual taxidermist report	25.00
Higby, Floyd L., Townsville. Lending hunting license to another	20.00
Kelly, Austin S., R. D. No. 2, Cambridge Springs. Hunting fox squirrels between 5 P. M. and 7 A. M.	15.00
Kightinger, John E., 474 E. Main St., Meadville. Possessing loaded rifle in vehicle standing on highway	10.00
Klandatos, George N., 220 N. Main St., Cambridge Springs. Entering propagation area; removing pheasant from live trap	50.00
Kolazer, Charles, Spartansburg. Shooting within 150 yds. of occupied building	25.00
Komar, Paul, R. D. No. 3, Cochran. Possessing one wood duck over daily limit	10.00
Lang, Richard A., Alden St., Meadville. Possessing loaded rifle in vehicle standing on highway	10.00
Lenox, William T., R. D. No. 3, Cambridge Springs. Hunting for squirrels between 5 P. M. and 7 A. M.	15.00
Luce, Milton E., 438 Spring St., Cambridge Springs. Entering State game propagation area; obtaining pheasant from live trap	50.00
Luce, Milton E., 438 Spring St., Cambridge Springs. Entering State game propagation area; removing pheasant from live trap	50.00
McGune, Francis L., R. D. No. 1, Townville. Killing two pheasants in closed season	50.00
McKay, William J., Venango. Possessing one wood duck over daily limit	10.00
Morian, Adam E., Atlantic. Possessing parts of deer unlawfully killed	100.00
Phelps, Floyd A., Conneaut Lake. Possessing parts of deer taken in closed season	100.00
Sherred, Raymond H., R. D. No. 2, Cambridge Springs. Possessing deer unlawfully taken	100.00
Sutter, Leroy R., R. D. 3, Spartansburg. Possessing loaded rifle in vehicle standing on highway	10.00
Talbot, Leo F., Atlantic. Shooting at unprotected target during big game season	10.00
Troxell, Clair F., Geneva. Killing two deer in closed season; using vehicle with lights attached for killing and transporting raccoon; possessing loaded rifle in vehicle in motion on highway	275.00
Webber, Clayton E., Spartansburg. Shooting within 150 yds. of occupied building	25.00

DAUPHIN—\$695.00

Annis, Lewis W., 209 Kelker St., Harrisburg. Hunting wild animals in safety zone	25.00
Barge, Charles F., 481½ Swatara St., Middletown. Shooting within 150 yds. of occupied building	25.00
Bartholomew, Richard L., 816 Capitol St., Harrisburg. Hunting wild animals in safety zone	25.00
Black, Matthew D., 1845 North St., Harrisburg. Hunting small game in party of more than 5 persons	5.00
Braim, Harry, R. D. 1, Dauphin. Hunting small game in party of more than 5 persons	5.00
Clarr, Robert G., 4635 Locust Lane, Harrisburg. Hunting within 150 yds. of occupied building	25.00
Clouser, Clarence L., Ulrich St., Royalton. Hunting small game in party of more than 5 persons	5.00
Clouser, Ralph C., Conewago St., Middletown. Hunting small game in party of more than 5 persons	5.00
Clouser, Richard D., Ulrich St., Royalton. Hunting small game in party of more than 5 persons	5.00
Clouser, Samuel J., Burd St., Royalton. Hunting small game in party of more than 5 persons	5.00
Clouser, William F., Jr., Burd St., Royalton. Hunting small game in party of more than 5 persons	5.00
Crain, Charles W., 200 Linn St., Progress. Hunting game between 5 P. M. and 7 A. M.	15.00
Davison, Lucian M., Jr., 2322 Boas St., Penbrook. Entering Auxiliary Refuge with firearm	25.00
Gaspari, Nazareno, 213 W. Granada Ave., Hershey. Shooting at pheasant within 150 yds. of occupied building	25.00
Garrison, Norwood R., 1112 Montgomery St., Harrisburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Graybill, Clayton S., R. D. No. 2, Hershey. Hunter damaging property	25.00
Grunden, Mason G., R. D. No. 1, Dauphin. Hunting small game in party of more than 5 persons	5.00
Hallman, Joseph, 918 Cowden St., Harrisburg. Failure to show hunters license on demand of officer	20.00
Herb, Howard O., 134 Spruce St., Williamstown. Possessing loaded rifle in vehicle standing along highway	10.00
Hess, Carl C., 256 E. Main St., Middletown. Hunting game with shotgun containing more than 3 shells	10.00
Jay, Conda C., 504 N. 2nd St., Harrisburg. Hunting game prior to opening hour first day	15.00
Kile, Walter L., 2046 Kensington St., Harrisburg. Hunting small game in party of more than 5 persons	5.00
King, Robert W., R. D. No. 1, Grantville. Using an automobile to kill game animals	50.00
Kyle, Lawrence D., R. D. No. 1, Dauphin. Hunting small game in party of more than 5 persons	5.00
Layne, Melvin R., 1112 Montgomery St., Harrisburg. Hunting game between 5 P. M. and 7 A. M.	15.00

Longreen, Lester L., R. D. No. 1, Grantville. Using an automobile to kill game	50.00
McColic, Martin, 232 Locust St., Steelton. Shooting within 150 yds. of occupied building	25.00
Matter, Adam R., Halifax. Shooting within 150 yds. of occupied building	25.00
Nye, Harry G., Jr., R. D. No. 1, Grantville. Using an automobile to kill game	50.00
Saul, Lemuel L., 613 Muench St., Harrisburg. Shooting across highway while hunting	25.00
Scheib, Harold P., R. D. No. 1, Tower City. Hunting without resident license	20.00
Seneca, Albert J., 117 Paxton St., Harrisburg. Hunting rabbits with shotgun containing more than 3 shells	10.00
Shepley, Karl E., Millersburg. Trapping 2 skunks in closed season	20.00
Shuttleworth, Lillian K., 303 Montrose St., Harrisburg. Lending hunting license and tag to another	20.00
Taylor, Robert G., 3708 Walnut St., Progress. Hunting without resident license	20.00
Wisman, Robert F., 530 S. Cameron St., Harrisburg. Hunting small game in party containing more than 5 persons	5.00
Watkins, Paul M., R. D. No. 1, Grantville. Failure to maintain complete roster of party hunting big game	25.00
Woodward, Frederick H., 519 McClay St., Harrisburg. Hunting within 150 yds. of occupied building	25.00

DELAWARE—\$420.00

Amrhein, David G., 103 Milmont Ave., Milmont. Hunting small game in party of more than 5 persons; shooting within 150 yds. of occupied building	30.00
Blosonski, Peter, Middletown Rd., Lima. Possessing loaded rifle in vehicle standing on highway	10.00
Carter, James W., 927 Pennell St., Chester. Possessing a protected bird	10.00
Crissy, John G., Media. Possessing quail killed in closed season	25.00
D'Annunzio, Joseph, 40 Shappett Terrace, Lansdowne. Hunting without resident license; possessing ringneck pheasant hen	45.00
Harris, Hamilton K., Jr., 509 E. Lancaster Ave., Wayne. Killing a woodchuck in closed season	10.00
Hendershot, Albert E., 2528 Lindsey St., Chester. Hunting without a resident license	20.00
Hettmansperger, Charles P., Jr., Newtown Square. Hunting rabbits with shotgun containing more than 3 shells; hunting without resident license	30.00
Kennedy, Peter D., 126 Crestview Rd., Upper Darby. Possessing a loaded rifle in vehicle in motion on highway	25.00
Kirk, John F., Edgemont. Failure to produce roster of party hunting big game	25.00
MacMichael, Daniel J., 2505 Academy Ave., Holmes. Possessing loaded rifle in vehicle standing along highway	10.00
McDonnell, Charles V., Gradyville. Shooting within 150 yds. of occupied building	25.00
McKenzie, Hovort H., 228 E. 5th St., Chester. Possessing loaded rifle in vehicle in motion on highway	25.00
Mease, Harold E., 214 Fairview Rd., Crum Lynne. Hunting small game in party of more than 5 persons	5.00
Quigley, Thomas J., Jr., 440 Fernwood St., Folsom. Hunting small game with shotgun containing more than 3 shells	10.00
Savastio, R. Roy, 514 Woodland Drive, Upper Darby. Failure to stop motor vehicle on signal of a Game Protector	10.00
Search, Gordon H., 314 E. 9th St., Chester. Failure to display license tag while hunting	20.00
Thomas, Elmer E., 628 Madison St., Chester. Failure to display license tag while hunting	20.00
Waley, Arthur P., 516 Tatnall Ave., Glenolden. Shooting within 150 yds. of occupied building	25.00
Walker, Elbert, 2 Howard St., Sharon Hill. Killing a protected bird	10.00
Weideman, William E., 1301 Worrel St., Crum Lynne. Hunting small game in party of more than 5 persons	5.00
Wilcox, William F., Garret Hill. Possessing hen pheasant	25.00

ELK—\$1,385.00

Boschert, John R., R. D. No. 1, St. Marys. Shooting at target more than 200 yds. from headquarters in big game season	10.00
Brigger, Albert E., 89 E. Grant St., Ridgway. Possessing loaded shotgun in vehicle in motion on highway	25.00
Buhler, John L., 100 Grant Road, Ridgway. Possessing loaded shotgun in vehicle in motion on highway	25.00
Cuneo, Gerald R., Washington St. Ext., St. Marys. Hunting in safety zone	25.00
Feldbauer, Harold O., 119 Walnut St., St. Marys. Hunting in safety zone	25.00
Haulby, Theodore S., Michael Rd., St. Marys. Possessing doe deer taken in closed season; selling parts of a deer	200.00
Hoffman, Gilbert A., 454 Parnde St., St. Marys. Hunting rabbits with shotgun containing more than 3 shells	10.00
Kelly, Rupert E., 504 Kearsarge St., Ridgway. Possessing loaded shotgun in vehicle standing along highway	10.00
Kent, Earl D., 325 High St., Johnsonburg. Shooting within 150 yds. of occupied building	25.00
Kilhoffer, Bernard G., 116 Harrison Ave., Ridgway. Setting four traps for mink in closed season; trapping without a license	60.00
Kline, Bernard J., 613 Bank St., St. Marys. Hunting in a safety zone	25.00
Krellner, Fred A., Vine Rd., St. Marys. Failure to maintain roster of party hunting big game; possessing four deer illegally for bartering; possessing a deer illegally for purpose of bartering	525.00
Mertz, William M., 414 Maurus St., St. Marys. Hunting within 150 yds. of occupied building	25.00
McCracken, Willis E., Kane. Hunting squirrels on Sunday	25.00
Minnick, Francis G., 872 Brussels St., St. Marys. Buying parts of a deer; transporting parts of deer unlawfully killed	200.00
Rhines, William C., 220 Orchard St., Ridgway. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway	25.00
Ryan, Timothy B., 323 S. St. Michaels St., St. Marys. Parking vehicle so as to block gate to State Game Lands	25.00
Selle, Robert J., R. D. No. 1, Wilcox. Possessing a deer without proper tag attached	25.00
Shreffler, David M., 20 E. Cardott St., Ridgway. Shooting at unprotected target in big game season	10.00
Walters, Leroy F., Tyler. Hunting without resident license	20.00
Yale, Russell E., Jr., Brookport. Killing ringneck pheasant hen	25.00
Zentz, Gary W., 1201 Front St., Ridgway. Setting four traps for mink in closed season	40.00

ERIE—\$1,120.00

Alexandrowicz Chester I., 1327 8th St., Erie. Hunting waterfowl after closing hour	15.00
Averill, Melvin R., 529 E. 13th St., Erie. Possessing loaded rifle in vehicle standing along highway	10.00
Banks, Burnett S., 117 E. 7th St., Erie. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Berkey, Charles S., 729 W. 17th St., Erie. Hunting ducks on Presque Isle State Park	25.00
Berkey, Raymond C., R. D. No. 6, Erie. Hunting on State Park ..	25.00
Bowser, Clifford L., 1007 Marshall Dr., Erie. Hunting game between 5 P. M. and 7 A. M.	15.00
Burbules, Elmer J., R. D. No. 5, Erie. Hunting rabbits on Sunday	25.00
Burbules, George J., R. D. 5, Erie. Hunting game on Sunday	25.00
Burbules, Stephen A., R. D. No. 4, Waterford. Hunting game on Sunday	25.00
Cheeseman, Lawrence S., R. D. No. 6, North East. Hunting game prior to opening hour first day	15.00
Clute, Ernest N., R. D. No. 1, Union City. Hunting without resident license	20.00
Craker, George E., 76 Elk St., Corry. Possessing loaded rifle in vehicle in motion on highway	25.00
Essigmann, Adolph M., 317 Chantantqua Blvd., Erie. Using unlawful craft to hunt waterfowl	50.00
Gangi, Elmer R., R. D. No. 1, McKean. Possessing loaded shotgun in vehicle in motion on highway	25.00
Godfrey, Raymond D., R. D. No. 1, Girard. Possessing loaded rifle in vehicle standing along highway	10.00
Haranin, Joseph J., R. D. No. 1, Albion. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Hoffman, Ignac, 929 E. 10th St., Erie. Hunting ducks with shotgun containing more than 3 shells	10.00
Johannes, Earl J. 3027 Parade St., Erie. Hunting wild game on dog training preserve	25.00
Johannes, Jerome E., 127 E. 30th St., Erie. Hunting wild game on dog training preserve	25.00
Johnson, William H., 318 W. 3rd St., Erie. Hunting within 150 yds. of occupied building	25.00
Jukes, Leonard J., 212 South St., Corry. Shooting at unprotected target in big game season	10.00
Kennedy, Everett R., R. D. 3, Corry. Throwing artificial light on deer while in possession of a firearm	100.00
Kremerick, John L., 246 Otin Ave., Girard. Hunting wild ducks after closing hour	15.00
Kiehmeier, William J., 232 Shorts St., Erie. Hunting on dog training preserve	25.00
Meeker, Harry N., 20 Smith St., North Girard. Shooting at random in big game season	10.00
Neimeic, Leroy J., 2526 Wallace St., Erie. Hunting in dog training preserve	25.00
Nelson, Orrie L., 1128 E. 27th St., Erie. Transporting parts of deer taken in close season; possessing parts of illegally killed deer	200.00
Ore, Vern D., 1313 Shenk Ave., Erie. Hunting game between 5 P. M. and 7 A. M.	15.00
Pfeil, Dale C., North Girard. Hunting with firearm not properly accompanied	20.00
Putnam, William J., 263 E. 30th St., Erie. Unplugged shotgun to hunt wild ducks	10.00
Richerson, Donald E., 127½ 2nd Ave., Corry. Hunting game on Sunday	25.00
Schmitz, Oliver E., 643 E. 14th St., Erie. Hunting waterfowl between 5 P. M. and 7 A. M.	15.00
Shaltis, Joseph A., 106 E. 2nd St., Erie. Possessing one wood duck over season limit	10.00
Sheets, Alfred, Waterford. Possessing a male pheasant taken in closed season	25.00
Smith, Carl E., 716 Tacoma Rd., Erie. Hunting waterfowl after closing hour	15.00
Strong, John W., 2614 Maple St., Erie. Killing protected bird ..	10.00
Steele, Harry D., 801 E. 10th St., Erie. Hunting waterfowl between 5 P. M. and 7 A. M.	15.00
Therasse, David R., R. D. No. 1, Edinboro. Hunting coots with shotgun containing more than 3 shells	10.00
Tracy, Louis, Jr., 645 E. 21st St., Erie. Killing a protected bird ..	10.00
Tucker, Paul B., 753 E. 21st St., Erie. Possessing loaded rifle in vehicle standing on highway	10.00
Van Tassell, Jack S., 2417 Cranberry St., Erie. Hunting waterfowl after closing hour	15.00
Waratuke, Mike J., 2214 Buffalo Rd., Erie. Hunting game prior to opening hour on first day	15.00
Wetzel, Leonard M., R. D. No. 7, Erie. Killing a protected bird ..	10.00
Wilson, Marshall O., North East. Possessing 8 wild ducks in excess of limit	80.00

FAYETTE—\$945.00

Albright, James L., Grindstone. Hunting without resident license	20.00
Banks, Charles, Grindstone. Shooting within 150 yds. of occupied building	25.00
Brownfield, Richard S., Uniontown. Possessing loaded rifle in vehicle standing on highway	10.00
Browning, Martha A., 127 Snowden St., Brownsville. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Colebank, Lawrence W., Grindstone. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Crow, Clarence M., Lake Lynn. Lending hunting license and tag to another	20.00
Darney, Daniel, Grindstone. Hunting within 150 yds. of occupied building	25.00
Delorenzo, James F., Jr., R. D. No. 3, Uniontown. Failure to produce roster of party hunting big game	25.00
Dennis, James E., R. D. No. 1, Ohiopyle. Possessing loaded shotgun in vehicle standing on highway	10.00
Durigon, Joseph P., Keisterville. Hunting within 150 yds. of occupied building	25.00
Durshlac, Maurice E., 6 18th St., Brownsville. Shooting within 150 yds. of occupied building	25.00
Fox, Thomas E., Pt. Marion. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
Frankenberry, Eli C., Jr., Pt. Marion. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
Harris, William E., Connellsville. Failure to maintain roster of party hunting big game	25.00

Helmick, Francis M., Uniontown. Hunting game prior to opening hour first day	15.00
Helmick, Thomas A., Uniontown. Hunting game prior to opening hour first day	15.00
Henckee, Scott, Farmington. Possessing deer taken in closed season	100.00
Hrovoski, Martin S., East Millsboro. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Hutchinson, Clarence J., Perryopolis. Possessing loaded rifle in vehicle in motion on highway	25.00
Kilgore, Norris E., Keisterville. Shooting within 150 yds. of occupied building	25.00
Kolencik, John F., New Salem. Hunting without resident license	20.00
Kostelnic, Anthony E., Connellsville. Hunting rabbits with shotgun containing more than 3 shells	10.00
Linkins, William G., Grindstone. Hunting without resident license	20.00
Long, Patsy, 239 N. Pittsburg St., Connellsville. Possessing loaded rifle in vehicle parked on highway	10.00
Mallory, Joseph D., 61 W. South St., Uniontown. Issuing hunter's license without satisfactory identification	20.00
Nicholson, Dale M., Normalville. Taking a rabbit by use of a deadfall	10.00
Pace, McKiney, Chestnut Ridge. Hunting without resident license ..	20.00
Peluso, Louis J., Grindstone. Hunting without resident license ..	20.00
Pyro, Andrew S., Markleysburg. Possessing male deer taken in closed season	100.00
Sanner, Robert L., Connellsville. Failure to post roster at camp as required	25.00
Stanchik, Mike M., 404 Highland Ave., Connellsville. Possessing loaded rifle in vehicle standing on highway	10.00
Strawser, Harrison E., R. D. No. 1, Lemont Furnace. Using illegal device to take rabbit	10.00
Strosnider, William A., R. D. 1, Grindstone. Hunting within 150 yds. of occupied building	25.00
Tarpley, Henry C., Fairchance. Failure to show hunter's license on demand	20.00
Thomas, Lorenzo, 5th Ave Ext., Brownsville. Failure to show hunting license on demand	20.00
Thomas, William H., R. D. No. 1, Millsboro. Hunting rabbits with shotgun containing more than 3 shells	10.00
Thompson, John R., Jr., Merrittstown. Hunting without resident license	20.00
Trenkle, Harry, Jr., R. D. No. 1, Connellsville. Possessing loaded rifle in vehicle in motion on highway	25.00
Vilchek, Robert J., R. D. No. 1, Brownsville. Hunting without resident license	20.00
Walton, Carl C., Fairchance. Failure to show hunters license on demand	20.00
Watson, Wayne E., Dunbar. Possessing loaded rifle in vehicle in motion on highway	25.00
Wentoba, Leonard G., Smock. Hunting without resident license ..	20.00

FULTON—\$195.00

than 5 persons; hunting game prior to opening hour first day ..	20.00
Mellott, Rankin E., Harrisonville. Hunting rabbits with shotgun containing more than 3 shells	10.00
Morton, Jack, Big Cove Tannery. Hunting rabbits with shotgun containing more than 3 shells	10.00
Sipes, Fred L., Harrisonville. Hunting small game in party of more than 5 persons; hunting game prior to opening hour first day ..	20.00
Strait, Norman B., Harrisonville. Hunting small game in party of more than 5 persons; hunting small game prior to opening hour first day	20.00
Swope, Coy E., Needmore. Attempting to take deer in closed season ..	100.00
Swope, Russell W., Jr., Wells Tannery. Hunting game prior to opening hour first day	15.00
Truax, Clarence A., R. D. No. 1, McConnellsburg. Possessing 2 rabbits taken in closed season	20.00

FRANKLIN—\$425.00

Anderson, Chester A., Mercersburg. Hunting game prior to opening hour first day	15.00
Bakner, Ray A., Waynesboro. Failure to tag deer within one hour after killing	10.00
Black, Paul M., Greencastle. Hunting without a resident license ..	20.00
Carbaugh, Clifford E., Mercersburg. Possessing loaded shotgun in vehicle standing along highway	10.00
Garing, Charles Y., Greencastle. Hunting game prior to opening hour first day	15.00
Houck, Glen C., Waynesboro. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Houser, George R., 29 Redwood St., Chambersburg. Possessing loaded shotgun in vehicle standing along highway	10.00
Manges, John P., 501 S. 4th St., Chambersburg. Killing ringneck pheasant hen	25.00
McFadden, Jack D., St. Thomas. Possessing loaded shotgun in vehicle in motion on highway	25.00
Lucket, Charles, Amberson. Possessing one gray squirrel over daily limit	10.00
Meliott, James, Fort Loudon. Hunting rabbits with shotgun containing more than 3 shells	10.00
Miller, Charles W., 223 S. Potomac St., Waynesboro. Shooting within 150 yds. of occupied building	25.00
Newemer, Roy M., R. D. No. 2, Waynesboro. Hunting without resident license	20.00
Peters, Eugene R., 41 Maple St., Chambersburg. Hunting game in Safety Zone	25.00
Shover, Harry R., 621 Black Ave., Chambersburg. Hunting wild ducks between 5 P. M. and 7 A. M.	15.00
Shuman, Myron J., R. D. No. 1, Greencastle. Aiding in securing hunting license for person not entitled to same	20.00
Small, Elmer L., Marion. Attempting to kill a spike buck	100.00
Smith, Daniel G., Dry Run. Entering auxiliary state game refuge in open game season	25.00
Stine, Ambrose J., 311 W. 3rd St., Waynesboro. Hunting without resident license	20.00
Vocke, William H., Fannettsburg. Hunting small game in party of more than 5 persons	5.00
Vocke, William J., Fannettsburg. Hunting small game in party of more than 5 persons	5.00

GREENE—\$235.00

Adams, William L., Rices Landing. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
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Barbetta, Anthony C., Mather. Hunting without resident license	20.00
Barnes, William, Rices Landing. Hunting game between 5 P. M. and 7 A. M.	15.00
Black, Fred C., Greensboro. Possessing skin of skunk unlawfully taken	10.00
Christopher, Aldon S., Rices Landing. Hunting game between 5 P. M. and 7 A. M.	15.00
Gelsweldt, George G., Greensboro. Hunting on Special Dog Training area	25.00
Grim, Wilfred E., New Freeport. Hunting game between 5 P. M. and 7 A. M.	15.00
Kerr, James W., Ned. Transporting two rabbits out of state	20.00
Lapana, Frank A., R. D. No. 1, Greensboro. Shooting at random during big game season	10.00
Lavins, William H., Jr., R. D. No. 1, Rices Landing. Shooting within 150 yards of occupied building	25.00
Tedrow, Edward, R. D. No. 2, Sycamore. Hunting without resident license	20.00
Tedrow, George, R. D. No. 6, Waynesburg. Hunting small game in party of more than 5 persons	5.00
Tedrow, John E., R. D. No. 6, Waynesburg. Hunting without resident license	20.00
Tressler, Thomas W., Dunkard. Hunting without resident license	20.00

HUNTINGDON—\$445.00

Bumgardner, William R., R. D. No. 2, Huntingdon. Attempting to take or kill deer in closed season; attempting to take or kill deer through the use of an artificial light	200.00
Dixon, Byrd, Huntingdon. Possessing loaded rifle in vehicle standing along highway	10.00
Flasher, Albert J., Rockhill Furnace. Possessing a muskrat taken in closed season	10.00
Frain, Edward A., 1120 Warm Springs Ave., Huntingdon. Lending resident hunter's license to another	20.00
Frain, John A., 1120 Warm Springs Ave., Huntingdon. Hunting unaccompanied between the ages of 14 and 16	20.00
Isenberg, Frank W., McConnellstown. Possessing loaded rifle in vehicle in motion on highway	25.00
Miller, Floyd H., Jr., R. D. No. 1, Huntingdon. Hunting without resident license	20.00
Rider, Edith M., Warrior Mark. Allowing parts of a deer killed for crop damage to leave property where killed	100.00
Runk, Glen H., McConnellstown. Hunting without resident license	20.00
Watkins, Doyle M., Cassville. Hunting without resident license	20.00

INDIANA—\$1,305.00

Boris, John A., 193 Philadelphia St., Indiana. Possessing one gray squirrel over daily limit	10.00
Cuckovich, Milo, Josephine. Shooting within 150 yds. of occupied building	25.00
Duncan, Charles L., R. D. No. 1, Indiana. Hunting rabbits with shotgun containing more than 3 shells	10.00
Dunmire, Lawrence S., Jr., West Lebanon. Hunting without resident license	20.00
Edwards, William L., R. D. No. 1, Home. Possessing two loaded rifles in vehicle in motion on highway	50.00
Gamble, Joseph P. Robinson. Attempting to defraud the Commonwealth through the collection of bounty	25.00
Gmys, Francis G., R. D. No. 1, Home. Training a dog on game while carrying a rifle	10.00
Hoover, Sutton M., R. D. No. 3, Indiana. Borrowing hunting license and tag of another	20.00
Horrell, Edgar S., R. D. No. 1, Blairsville. Killing doe deer in closed season	100.00
Houser, Frank S., R. D. No. 1, Smicksburg. Hunting game between 5 P. M. and 7 A. M.	15.00
Huber, Albert, 1024½ Philadelphia St., Indiana. Possessing bear less than one year old	200.00
Hunter, David C., Penn Run. Hunting without resident license	20.00
Insana, Pietro, Aultman. Possessing grouse taken in closed season	25.00
Jones, Edgar K., R. D. No. 1, Blairsville. Possessing and assisting to conceal with intent to use deer unlawfully killed	100.00
Jones, James E., R. D. No. 1, Blairsville. Possessing and assisting to conceal with intent to use deer unlawfully killed	100.00
Jones, Leonard, R. D. No. 1, Blairsville. Possessing and assisting to conceal with intent to use game unlawfully killed	100.00
Keith, Clarence H., R. D. No. 2, Cherry Tree. Cutting down tree on State Game Lands	25.00
McClure, James R., Robinson. Hunting within 150 yds. of occupied building	25.00
McCombie, William E., Spangler. Hunting game prior to opening hour first day	15.00
McMillen, Zeddie, R. D. No. 1, Rochester Mills. Entering Auxiliary Game Refuge in open game season	25.00
Miller, Huston L., Beyer. Failure to produce roster of party hunting big game	25.00
Palmer, Bernard H., R. D. No. 2, Marion Center. Hunting without resident license	20.00
Ratay, Tony, Homer City. Hunting, pursuing, or disturbing wild birds and animals in Safety Zone	25.00
Shabella, John T., Jr., 214 W. Market St., Blairsville. Shooting across highway while hunting	25.00
Thompson, James H., Smicksburg. Possessing two ringneck pheasant hens	50.00
Wissinger, Floyd A., Cherry Tree. Lending hunting license and tag to another	20.00
Wolfe, Glenn, 1273 Church St., Indiana. Shooting at target more than 200 feet from headquarters in big game season	10.00
Wolfe, Robert C., Strongstown. Shooting at random in big game season	10.00
Zugates, Thomas R., 1170 Water St., Indiana. Possessing bear less than one year old	200.00

JEFFERSON—\$230.00

Astorino, Guy, Walston. Using road on State Game Lands closed vehicular traffic	25.00
Atchison, Clinton E., R. D. No. 5, Punxsutawney. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway between 5 P. M. and 7 A. M.	25.00
Bargerstock, Clinton E., R. D. No. 2, Punxsutawney. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
Basile, Floyd C., 248 Jenks Ave., Punxsutawney. Disturbing wildlife on State Game Propagation Area	25.00

Bowley, Ernest L., R. D. No. 4, Brookville. Hunting rabbits with shotgun containing more than 3 shells	10.00
Clontz, Leroy E., R. D. No. 1, Reynoldsville. Shooting within 150 yards of occupied building	25.00
Curry, Ralston A., 200 Beyer Ave., Punxsutawney. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Grube, George, 100 Scotland Ave., Punxsutawney. Hunting without resident license	20.00
Hannold, Dale C., 58 Banks St., Brookville. Shooting across highway while hunting game	25.00
Hardick, Andy, 323 N. Mann St., Punxsutawney. Failure to display license tag while hunting	20.00
Nogacek, Casper, R. D. No. 2, Punxsutawney. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
Peace, Theodore S., Cloe. Attempting to kill one rabbit over daily bag limit	10.00

JUNIATA—\$95.00

Gearhart, Frank R., R. D. No. 1, McAlisterville. Failure to display license tag while hunting	20.00
Gilson, Ralph M., Jr., Port Royal. Shooting across highway while hunting game	25.00
Peterson, Glenn R., Port Royal. Shooting within 150 yds. of occupied building	25.00
Taylor, Roscoe S., R. D. No. 1, Richfield. Shooting within 150 yds. of occupied building	25.00

LACKAWANNA—\$385.00

Biondi, Michael J., 619 Warren St., Peckville. Hunting within Safety Zone	25.00
Cavanaugh, John J., 223 Gibson St., Scranton. Transporting untagged deer	25.00
Celli, John, 348 Maple St., Peckville. Hunting small game with more than 5 shells in shotgun	10.00
Davis, George A., Gouldsboro. Hunting small game with shotgun containing more than 3 shells	10.00
Kawash, John, Sr., 618 Hudson St., Mayfield. Failure to tag deer within one hour after killing	10.00
Krakowski, Edmond, 1246 Mowry St., Old Forge. Failure to produce identification on demand of an officer; failure to show license to landowner or lessee upon demand	40.00
Krott, Frank J., 633 Carmalt St., Dickson City. Failure to report shooting accident causing injury to another	25.00
Lorenzetti, Dominick U., 558 Main St., Eynon. Hunting without non-resident license	50.00
Lozinski, John, 1278 Bennett St., Old Forge. Failure to produce identification upon demand of Game Protector; failure to show license to landowner or lessee upon demand	40.00
Maldonado, Joseph L., 2129 Prospect St., Scranton. Hunting in Safety Zone	25.00
Maldonado, Leonard R., 1019 E. Locust St., Scranton. Hunting in Safety Zone	25.00
Ostroski, Ernest, 1053 Water St., Moosic. Shooting within 150 yds. of occupied building	25.00
Pavlikoski, Paul, 1427 Mowry St., Old Forge. Failure to show hunter's license to landowner or lessee upon demand	20.00
Ravinsky, Alex J., 442 Delaware St., Peckville. Possessing loaded rifle in vehicle standing on highway	10.00
Sawkulich, Frank, 1745 Bundy St., Scranton. Hunting game prior to opening hour first day	15.00
Vogelbacher, Adolph, Jr., R. D. 3, Moscow. Failure to display license tag while hunting	20.00
Weed, Charles R., 15 Belmont St., Carbondale. Attempting to transport a rabbit out of State without possessing non-resident license	10.00

LAWRENCE—\$435.00

Adams, Leonard R., 1412 Delaware Ave., New Castle. Possessing loaded rifle in vehicle standing on highway	10.00
Adams, Robert A., 1412 Delaware Ave., New Castle. Possessing loaded rifle in vehicle standing along highway	10.00
Altman, William L., Wampum. Failure to maintain roster of party hunting big game	25.00
Bonacker, Fred W., R. D. No. 2, New Castle. Possessing loaded rifle in vehicle in motion on highway	25.00
Book, Charles R., R. D. No. 8, New Castle. Transporting untagged deer	25.00
Brummitt, Donald A., 118 Market St., New Wilmington. Hunting game within 150 yards of occupied building	25.00
Candioto, Thomas E., R. D. No. 4, New Castle. Hunting without resident license	20.00
Carbone, John, R. D. No. 1, Edinburg. Possessing one wood duck over season limit	10.00
Flynn, Leo E., 921 E. Washington St., New Castle. Killing pheasant hen	25.00
Geneva, Philip G., R. D. No. 1, Edinburg. Possessing one wood duck over season limit	10.00
Glove, John W., Jr., 222 N. Ray St., New Castle. Failure to tag deer within one hour after killing	25.00
Koch, Robert E., 1216 S. Jefferson St., New Castle. Possessing hen pheasant	25.00
Johns, Ronald L., R. D. No. 5, New Castle. Hunting ducks after closing hour	15.00
Marks, Richard E., R. D. No. 9, New Castle. Hunting ducks after closing hour	15.00
McCormick, Ralph S., R. D. No. 5, New Castle. Transporting untagged venison	25.00
Micco, Anthony, Hillsville. Shooting within 150 yards of occupied building	25.00
Newtown, Wesley L., 104 Pine St., New Castle. Hunting ducks after closing hour	15.00
Servick, John L., 527 Electric St., New Castle. Hunting game between 5 P. M. and 7 A. M.	15.00
Sheaf, Clyde, 711 Corton Ave., New Castle. Aiding in securing license for person not entitled to same	20.00
Smith, Donald L., R. D. No. 3, Volant. Failure to purchase roster of party hunting big game	25.00
Stewart, Robert E., Newell Ave., New Castle. Possessing loaded rifle in vehicle standing along highway	10.00
Tumis, Michael, 1745 Wilson Ave., New Castle. Hunting within 150 yards of occupied building	25.00
Yoho, Robert L., Enon Valley. Possessing loaded rifle in vehicle standing on highway	10.00

LANCASTER—\$1,355.00

Bare, Alvin K., Bird-in-Hand. Killing male deer net having two points to one antler	100.00
Bonawitz, Edward C., Bird-in-Hand. Possessing loaded shotgun in vehicle in motion on highway	25.00
Breit, Michael, 720 Fremont St., Lancaster. Shooting within 150 yards of occupied building	25.00
Cochran, Ray E., R. D. No. 1, Bareville. Failure to display license tag while hunting	20.00
Eckman, Robert W., R. D. No. 1, Willow Station. Shooting within 150 yards of occupied building	25.00
Elliot, Wayne H., 224 E. New St., Lititz. Aiding and securing a resident hunting license for a person not entitled to same	20.00
Eshlemen, Benjamin S., R. D. No. 1, Lancaster. Shooting within 150 yards of occupied building	25.00
Finnefrock, Ernest W., 436 E. Chestnut St., Lancaster. Shooting within 150 yards of occupied building	25.00
Foultz, Jeanne, Loane Gap. Shooting within 150 yards of occupied building	25.00
Foultz, Leroy T., R. D. No. 3, Lancaster. Shooting within 150 yards of occupied building	25.00
Frackman, C. E., Christiana. Digging, smoking or scaring game out of place of refuge	10.00
Garber, Harry W., 41 E. Main St., Lititz. Issuing a hunters license without satisfactory identification	20.00
Gerard, Paul E., 724 Fulton St., Akron. Shooting within 150 yards of occupied building	25.00
Glover, Lloyd J., Landisville. Killing ringneck pheasant from an automobile	25.00
Gochenauer, Paul L., 336 N. Plum St., Lancaster. Killing a protected bird	10.00
Groff, Joseph P., Smoketown. Killing a ringneck pheasant hen in closed season	25.00
Hammond, George Jr., 840 Grand View Blvd., Lancaster. Shooting within 150 yds. of occupied building	25.00
Harnish, Clarence M., R. D. 1, Willow Station. Shooting within 150 yds. of occupied building	25.00
Heisey, Rufus W., R. D. 1, Manheim. Taking a skunk with the aid of an artificial light	10.00
Hesslet, Ray, Bainbridge. Possessing loaded rifle in vehicle standing along highway	10.00
Higes, George M., 125 E. Walnut St., Ephrata. Hunting without a resident license; attempting to shoot ringneck pheasant between the hours of 5 P. M. and 7 A. M.	35.00
Hoover, Geyer G., Rothsville. Failure to display license tag while hunting	20.00
Jenkins, Clyde R., R. D. 1, Pequea. Failure to produce roster of party hunting big game	25.00
Kirchner, Edward F., 516 Fremont St., Lancaster. Killing game between the hours of 5 P. M. and 7 A. M.; failure to display license tag while hunting	35.00
Koser, Claire M., R. D. 2, Manheim. Killing pheasant from a tractor	25.00
Kranch, Robert G., 839 E. Walnut St., Lancaster. Shooting within 150 yds. of occupied building	25.00
Landis, Willis E., R. D. 1, Paradise. Shooting within 150 yds. of occupied building	25.00
Leeking, Ivan W., Millway. Possessing loaded rifle in vehicle standing along highway	10.00
Martin, Harvey H., R. D. 3, Lititz. Shooting across highway while hunting game; shooting within 150 yds. of occupied building; hunting between 5 P. M. and 7 A. M.	65.00
Miller, David S., 43 S. Broad St., Lititz. Attempting to transport pheasant out of state	25.00
Montondo, Larence G., 130 Dauphin St., Lancaster. Shooting within 150 yds. of occupied building	25.00
Moore, William C., 217 E. Liberty St., Lancaster. Shooting within 150 yds. of occupied building	25.00
Overly, John A., 635 Janet Ave., Lancaster. Shooting within 150 yds. of occupied building	25.00
Pizzola, John R., 823 Prangle Ave., Lancaster. Shooting within 150 yds. of occupied building	25.00
Riley, Warren N., 22 Campbell St., Lancaster. Shooting within 150 yds. of occupied building; failure to show license on demand	45.00
Ruoss, Robert E., 181 Church Ave., Ephrata. Shooting within 150 yds. of occupied building	25.00
Shenk, Christian H., R. D. 3, Lancaster. Shooting within 150 yds. of occupied building; hunting, pursuing and disturbing wild birds and animals in Safety Zone	50.00
Shirk, John R., Paradise. Shooting within 150 yds. of occupied building	25.00
Shivery, Ellisha T., 44 Broad St., Christiana. Failure to produce identification on demand of officer	20.00
Shoff, Eugene C., 439 W. Orange St., Lancaster. Shooting within 150 yds. of occupied building	25.00
Shoff, Preston, 439 W. Orange St., Lancaster. Hunting, chasing, disturbing and pursuing wild birds and animals in Safety Zone	25.00
Stauffer, Richard H., 718 W. Broad St., Akron. Shooting within 150 yds. of occupied building	25.00
Stroh, Curtis, 38 College Ave., Elizabethtown. Shooting within 150 yds. of occupied building	25.00
Swinehart, Ernest C., R. D. 1, Paradise. Hunting without resident license; shooting at and attempting to kill deer in closed season	120.00
Trago, George M., Gap. Possessing a groundhog in closed season; possessing parts of ringneck pheasant hen	35.00
Weaver, Charles R., R. D. 2, New Holland. Failure to show hunters license to landowner on demand	20.00
Zellner, Joseph, 674 Hebrank St., Lancaster. Shooting within 150 yds. of occupied building	25.00

LEBANON—\$1,105.00

Alspach, Harold A., 114 S. Cherry St., Myerstown. Killing a protected bird	10.00
Bishop, Paul H., R. D. 2, Lebanon. Shooting within 150 yds. of occupied building	25.00
Blair, Lester G., R. D. 1, Grantville. Hunting without resident license	20.00
Burkhold, William E., R. D. 3, Lebanon. Hunting without resident license	20.00
Deitzler, John, R. D. 1, Jonestown. Hunting without resident license; killing rabbit in closed season	20.00
Dengler, Ralph D., 631 E. Weidman St., Lebanon. Possessing ringneck pheasant hen; hunting in Safety Zone	50.00

Englend, Edwin M., 807 S. 12th St., Lebanon. Shooting within 150 yards of occupied building	25.00
Foltz, George H., 361 Prune St., Lebanon. Hunting in Safety Zone	25.00
Gettle, Warren M., 429 Schull St., Lebanon. Hunting in Safety Zone	25.00
Graby, Donald H., Cleona. Failure to tag trap	10.00
Greeninger, Richard E., R. D. No. 2, Lebanon. Hunter damaging property (building); shooting within 150 yards of occupied building	50.00
Herman, Earl W., 427 Schull St., Lebanon. Hunting in Safety Zone	25.00
Herman, Frank E., 429 Schull St., Lebanon. Hunting in Safety Zone	25.00
Hoffman, Ira A., Jr., Box 82, Palmyra. Failure to display license tag while hunting; throwing artificial light upon deer while in possession of firearm; hunting without resident license; throwing artificial light upon deer while in possession of firearm	240.00
Knapp, James J., R. D. No. 2, Jonestown. Transporting improperly tagged deer	25.00
Kohr, Charles B., Prescott. Possessing loaded shotgun in vehicle in motion on highway	25.00
Krall, Norman A., R. D. No. 2, Myerstown. Hunting game between 5 P. M. and 7 A. M.	15.00
Lehman, Earl R., R. D. No. 1, Palmyra. Failure to tag trap	10.00
Mease, Elsworth M., R. D. No. 1, Jonestown. Hunting small game in party of more than 5 persons	5.00
Mease, Richard K., R. D. 3, Jonestown. Hunting small game in party of more than 5 persons	5.00
Mitchell, James W., Annville. Using a steel trap to take a rabbit	10.00
Nickliss, Elijah, 207 S. Cherry St., Annville. Hunting in Safety Zone	25.00
Rothermel, Robert A., 1157 Federal St., Lebanon. Hunting in Safety Zone	25.00
Underkoffer, Marlin, 712 Locust St., Lebanon. Shooting within 150 yards of occupied building	25.00
Wagner, Russel L., R. D. No. 1, Palmyra. Possessing ringneck pheasant hen	25.00
Waybright, Jason P., 146 N. Franklin St., Palmyra. Possessing deer taken in closed season	100.00
Waybright, Joseph J., R. D. No. 1, Annville. Possessing deer taken in closed season	100.00
Waybright, Junior M., 146 N. Franklin St., Palmyra. Possessing deer taken in closed season	100.00
Wolfe, Henry M., R. D. No. 3, Lebanon. Hunting without resident license	20.00
Zimmerman, Lloyd M., R. D. No. 1, Myerstown. Hunting without resident license	20.00

LEHIGH—\$815.00

Bachert, James D., 36 S. Law St., Allentown. Killing a ringneck hen	25.00
Becker, Carl M., Guth Station R. D. No. 3, Allentown. Killing male deer not having two points to one antler	100.00
Berta, Peter, 348 Hamilton St., Allentown. Shooting within 150 yards of occupied building	25.00
Braim, Lee R., Main St., Macungie. Hunting small game in party of more than five persons	5.00
Braim, Ralph, 811 E. Main St., Macungie. Hunting small game in party of more than 5 persons	5.00
Brown, Earl G., 432 Harrison St., Allentown. Hunting without resident license	20.00
Brutchak, Frank, 740 Second St., Catasauqua. Failure to show hunter's license on demand	20.00
Charles, Curtis R., 424 N. Hall St., Allentown. Hunting ducks between 5 P. M. and 7 A. M.	15.00
Daubert, Dale W., 343 N. 16th St., Allentown. Hunting small game in party of more than 5 persons	5.00
DeWitt, Emmett J., Star Route, Allentown. Failure to display license tag while hunting	20.00
Hartman, Richard E., 525 Chew St., Allentown. Possessing loaded shotgun in vehicle standing along highway	10.00
Flamisch, George W., 318 N. Front St., Allentown. Hunting small game in party of more than 5 persons	5.00
Flamisch, Joseph, 318 N. Front St., Allentown. Hunting small game in party of more than 5 persons	5.00
Griffith, John O., 208 N. 7th St., Allentown. Killing spike buck deer	100.00
Jandl, Fred J., R. No. 3, Allentown. Hunting small game in party of more than 5 persons	5.00
John, Kermit L., 626 16th Ave., Bethlehem. Shooting at unprotected target in big game season	10.00
Kemmerer, Morris W., R. D. No. 1, Macungie. Using a tractor to hunt for game	50.00
Konapelsky, Peter J., 31 Washington St., Cementon. Shooting across highway while hunting game	25.00
Litzenberger, Sterling R., 222 W. Main St., Wescosville. Hunting game between 5 P. M. and 7 A. M.	15.00
Miller, Garry E., 626 N. Lucas St., Allentown. Hunting game between 5 P. M. and 7 A. M.	15.00
Mory, Edwin P., 422 N. 11th St., Allentown. Possessing loaded rifle in vehicle in motion on highway	25.00
Moyer, Ray W., Coopersburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Mumbauer, Warren Dorsey, 1667 Broadway Ave., Bethlehem. Hunting small game in party of more than 5 persons	5.00
Myers, Jr., Clarence Eugene, 233 N. Jordan St., Allentown. Hunting small game in party of more than five persons	5.00
Ott, William T., 6 Grape St., Allentown. Hunting small game in party of more than five persons	5.00
Pokotello, Peter, Box 35, Stettlersville. Failure to display license tag while hunting	20.00
Rabenold, Raymond H., 2114 Hanover Ave., Allentown. Failure to display license tag while hunting	20.00
Reese, Martin, Breinigsville, R. D. No. 1. Hunting without resident license	20.00
Robinson, John A., 1447 Tilghman St., Allentown. Hunting small game in party of more than five persons	5.00
Rohrbach, Homer P., 522 Liberty St., Allentown. Possessing loaded shotgun in vehicle standing along highway	10.00
Schaffer, Elmer A., R. D. No. 2, Coopersburg. Hunting without resident license	20.00
Schleifer, Charles E., Old Zionville. Hunting small game in party of more than five (5) persons	5.00
Schlicher, Lewis J., 1827 E. Clair St., Allentown. Hunting small game in party of more than five (5) persons	5.00
Schmoyer, Willard C., R. D. No. 1, Wescosville. Hunting and disturbing game in safety zone	25.00
Sikler, Charles J., 531 Wire St., Allentown. Hunting small game in party of more than 5 persons	5.00

Spinoza, Sol. 19 N. Jerome St., Allentown. Hunting without resident license	20.00
Stengel, Andrew Albert. 105 S. Jordan St., Allentown. Assisting in the taking of a ringneck pheasant hen	25.00
Sutjak, Jr., Joseph F., R. D. No. 1, Allentown. Failure to display license tag while hunting; killing ringneck pheasant hen	45.00
Tonelis, Peter, 1948 Main Blvd., Allentown. Shooting across highway while hunting game	25.00
Werner, Clark J., 406 Sixth St., Fullerton. Possessing pheasant hen	25.00

LUZERNE—\$1,315.00

Bach, John L., Jr., 84 W. Butler St., Shickshinny. Hunting without resident license	20.00
Bach, Lloyd T., 141 N. Canal St., Shickshinny. Lending a hunting license to another	20.00
Barbacci, Armo D., 26 E. Carey St., Plains. Hunting small game in party of more than 5 persons	5.00
Bilko, Stephen T., 6 Honey Pot St., Nanticoke. Possessing loaded rifle in vehicle standing on highway	10.00
Brek, Daniel, 899 Miller St., Luzerne. Hunting game on state game area	25.00
Bull, Ira D., 202 W. 3rd St., Nescopeck. Possessing one grouse in closed season	25.00
Cello, Angelo, 15 Lines Alley, Pittston. Hunting game between 5 P. M. and 7 A. M.	15.00
Chesluk, Theodore, 96 S. Maple Ave., Kingston. Hunting game between 5 P. M. and 7 A. M.	15.00
Croop, James Stanley, Hunlocks Creek. Possessing a loaded gun in vehicle along highway; shooting at unprotected target in big game season	20.00
Cusma, Walter L., 103 Davenport St., Plymouth. Issuing hunters license without satisfactory identification	20.00
Demchak, Joseph, 9 Kniffen St., Wilkes-Barre. Failure to tag two traps	20.00
Ercolani, Amedeo, 340 N. Main St., Plains. Hunting small game in party of more than 5 persons	5.00
Ercolani, Mario, 342 Main St., Plains. Hunting small game in party of more than five (5) persons	5.00
Ercolani, Tito, 342 Main St., Plains. Hunting small game in party of more than five (5) persons	5.00
Evanicki, William T., 553 Pringle St., Pringle (Kingston). Hunting wild birds or animals in safety zone	25.00
Fairchild, Lester E., R. D. No. 1, White Haven. Removing shrubs from state game lands	25.00
Fisher, John L., 23 S. Welles St., Kingston. Aiding in securing hunting license for person not entitled to same	20.00
Forte, William M., 869 N. Vine St., Hazleton. Hunting within 150 yards of occupied building	25.00
Ganski, William C., R. D. No. 2, Hunlock Creek. Taking seven muskrats in closed season	70.00
Garney, Raymond M., Jr., 467 Washington Ave., Plymouth. Hunting game between 5 P. M. and 7 A. M.	15.00
Garrison, William H., 135 Main St., Shickshinny. Hunting without resident license	20.00
Gensel, Earl E., 56 West Union St., Shickshinny. Possessing loaded shotgun in vehicle in motion on highway	25.00
Giull, Louis J., 188 Chamberlain St., Plainsville. Hunting small game in party of more than five (5) persons	5.00
Grodzicki, John, 180 Garfield St., Nanticoke. Possessing loaded rifle in vehicle standing along highway	10.00
Harvey, Gilbert V., R. D. No. 1, Sweet Valley. Hunting without resident license	20.00
Kivler, Harry A., 295 State St., Nanticoke. Possessing loaded rifle in vehicle standing along highway	10.00
Knopczyks, Joseph, 75 S. Walnut St., Wilkes-Barre. Killing grouse in closed season	25.00
Konesky, Charles C., 63 W. Thomas St., Wilkes-Barre. Hunting game between 5 P. M. and 7 A. M.	15.00
Lenchick, Joseph, R. D. No. 1, Trucksville. Hunting wild animals on state game area	25.00
Lombardo, Louis, R. D., Drums. Possessing one rabbit over daily limit	10.00
Lynott, Michael T., 1½ Benedict St., Pittston. Failure to stop motor vehicle upon signal of Game Protectors	10.00
Malinoski, Edmund, 29 Abbott St., Plains Twp., Wilkes-Barre. Failure to display license tag while hunting	20.00
Matthews, George, 283 Main St., Kingston. Hunting game between 5 P. M. and 7 A. M.	15.00
Mesavitz, Lawrence Jr., 159 Price St., Kingston. Hunting wild birds or animals in safety zone	25.00
Moss, George Russell, 403 Hanover St., Nanticoke. Lending license to another	20.00
Moss, Stanley H., R. D. No. 1, Hunlock Creek. Aiding in securing hunting license for person not entitled to same	20.00
Mowery, Warren W., R. F. D., Mountain Top. Transporting untagged deer	25.00
Mras, John A., 299 Lynwood Ave., Wilkes-Barre. Possessing loaded gun in vehicle standing on highway	10.00
Murat, Michael, 475 Slocum St., Swoyersville. Hunting game between 5 P. M. and 7 A. M.	15.00
Napersky, Stanley J., 85 Tripp St., Forty Fort. Hunting game between 5 P. M. and 7 A. M.	15.00
Nat, Joseph F., 164 E. State St., Larksville. Possessing a protected bird	10.00
Okonieski, Stephen, R. D. No. 1, Wapwallopen. Possessing loaded rifle in vehicle standing on highway	10.00
Orsulich, Milton J., 294 Slocum St., Swoyersville. Unlawfully transporting one rabbit out of state	10.00
Panzarella, Joseph, Box 88, Pardeesville. Permitting dog under his control to enter Auxiliary Game Refuge and molest game ..	25.00
Probst, George D., R. D. No. 3, Shickshinny. Hunting in Safety Zone	25.00
Proletto, Louis S., 45 E. Oak St., Browntown, Pittston. Hunting without non-resident license	50.00
Raghcini, Alfred P., 33 Slope St., Plains. Hunting small game in party of more than five persons	5.00
Reedy, Leo C., 218 Packer St., Avoca. Killing ringneck pheasant hen	25.00
Reithoffer, Patrick E., Jr., Box 69, Dallas. Killing a protected bird	10.00
Roberts, Marvin R., 50 N. Mill St., W. Nanticoke. Hunting game between 5 P. M. and 7 A. M.; Failure to display license tag while hunting; Possessing loaded shotgun in vehicle in motion on highway	60.00
Rodda, Douglas, R. D. No. 1, Mountain Top. Possessing protected bird	10.00

Rowe, Arthur J., 139 Sambourn St., Wilkes-Barre. Camping on state game area	25.00
Rozelle, Nelson F., 312 Linden St., W. Pittston. Failure to tag deer within one hour after killing	10.00
Russell, Anthony V., 896 Alter St., Hazleton. Shooting within 150 yds. of occupied building	25.00
Rysner, Stanley J., Sr., 519 Watt St., Duryea. Hunting without license	20.00
Schreers, Frank A., Hartland Park, R. D. No. 1, Hazleton. Hunting wild birds or animals in safety zone	25.00
Shields, Clifford F., R. D. No. 3, Dallas. Possessing one grouse taken in closed season	25.00
Sipple, Loren R., 9 Constine Ct., Wilkes-Barre. Possessing loaded rifle in vehicle in motion on highway	25.00
Sodoski, Vincent, 214 Penn St., Wilkes-Barre. Hunting wild animals in safety zone	25.00
Stanton, Ivor G., 34 Chapel St., Wilkes-Barre. Possessing loaded gun in vehicle while standing along highway	10.00
Stein, Henry M., R. D. No. 1, Wapwallopen. Possessing loaded gun in vehicle while standing on highway	10.00
Szot, John J., Railroad St., Mocanaqua. Hunting without resident license	20.00
Valkos, Leonard J., 45 Friend St., Port Griffith. Hunting without license	20.00
Veitch, Emerson, Dallas. Possessing two rabbits over the daily limit	20.00
Vols, Frank M., 1043 Dawson St., Avoca. Failure to tag deer one hour after killing	10.00
Warner, George Charles, 6 Graham Ave., Lee Park, Wilkes-Barre. Shooting within 150 yds. of occupied building without consent of owner	25.00
Webb, Arthur, 691 N. Main St., Pittston. Assisting to conceal game unlawfully taken	25.00
Zambeto, Samuel, R. D. No. 1, Trucksville. Hunting game animal on state game area	25.00

LYCOMING—\$1,110.00

Bachman, John Ellis Y., 418 East Central Ave., S. Williamsport. Possessing a loaded rifle in vehicle standing along highway	10.00
Breon, Carl F., 923½ Vine Ave., Williamsport. Possessing loaded shotgun in vehicle in motion on highway	25.00
Bidlespacher, John Franklin, Trout Run. Possessing loaded rifle in vehicle standing on highway	10.00
Bromley, Alton R., R. D. No. 1, Liberty. Possessing parts of deer in close season	100.00
Clark, Elwood James, 309 Grover St., Jersey Shore. Permitting dog to enter Auxiliary State Game Refuge	25.00
DeWalt, Elwood H., R. D. No. 2, Montgomery. Transporting deer not tagged	25.00
DeWalt, Lehman C., R. D. No. 2, Montgomery. Transporting deer not tagged	25.00
Gallagher, John Joseph, 2315 Hillside Ave., Williamsport. Possessing parts of deer taken in close season	100.00
Gardner, Howard Grant, Box 45, Trout Run. Possessing parts of deer taken in closed season	100.00
Hetzel, Carl W., R. D. No. 1, Liberty. Possessing parts of deer in close season	100.00
Johnson, Owen B., 952 Allegheny St., Jersey Shore. Possessing two squirrels over daily limit	20.00
Kiess, William H., 2400 E. Third St., Williamsport. Shooting upon lands of hospital	25.00
Kurtz, Harold A., R. D. No. 1, Williamsport. Hunting without resident license	20.00
McBride, Edward B., 1427 Walnut St., Jersey Shore. Possessing parts of deer in closed season	100.00
Myers, George C., 721 Market St., Williamsport. Attempting to kill second deer in one season	100.00
Rogers, Herbert M., R. D. No. 1, Cogan Station. Hunting game between 5 P. M. and 7 A. M.	15.00
Snyder, Matthew J., 427 Wilson St., Jersey Shore. Transporting a deer unlawfully taken; Possessing parts of deer in close season ..	150.00
Strouse, Harold L., 117 Broad St., Montgomery. Shooting at unprotected target in big game season	10.00
VanEmon, Carl St. Clair, 304 Railroad St., Jersey Shore. Possessing parts of deer taken in close season; Transporting deer unlawfully taken	150.00

MERCER—\$590.00

Beagle, Charles W., R. D. No. 2, Sandy Lake. Possessing loaded rifle in vehicle in motion	25.00
Berchtold, William O., 506 Spruce St., Sharon. Killing rabbit with shotgun containing more than 3 shells	10.00
Blair, Harold L., Carlton. Shooting within 150 yds. of occupied building	25.00
Bond, Ralph O., R. D. No. 1, Hadley. Possessing loaded rifle in vehicle standing along highway	10.00
Clark, Samuel B., R. D. No. 1, Greenville. Hunting within 150 yards of occupied building	25.00
Cooper, Clifford W., R. D. No. 1, Greenville. Hunting wild animals in safety zone	25.00
Ebbert, Ross A., Box 163, Sandy Lake. Possessing loaded rifle in vehicle standing along highway	10.00
Guyann, Dwight T., Jr., 267 Alderman Ave., Sharon. Shooting at wild ducks after closing hour	15.00
Gerdy, Mike, 205 E. Budd St., Sharon. Hunting pheasants between 5 P. M. and 7 A. M.	15.00
Hayden, John T., 216 Alwine Ave., Greensburg. Possessing loaded rifle in vehicle standing along highway	10.00
Helton, Ples, R. D. No. 2, Greenville. Hunting without non-resident license	50.00
Hite, Willard L., R. D. No. 4, Greensburg. Possessing loaded rifle in vehicle standing along highway	10.00
Morrison, Norman L., Transfer, Mercer. Hunting ducks after closing hour	15.00
Pesek, Paul R. D. No. 6, Mercer. Hunting without resident license	20.00
Polonus, Frederick N., 423 Alderman Ave., Sharon. Shooting at wild duck after closing time	15.00
Reiter, Herbert P., 208 19th St., Sharpsburg. Shooting at ducks between 5 P. M. and 7 A. M.	15.00
Rishel, Waide N., 1575 Griswold St., Sharon. Transporting untagged deer	100.00
Sample, Charles C., 67 Emerson Ave., Wheatland. Killing pheasant hen in closed season	25.00
Santell, John F., 943 Hamilton Ave., Farrell. Hunting without resident license	20.00

Sarcinella, Patrick A., R. D. No. 3, Greenville. Hunting without resident license	20.00
Scelsi, Dominic, 309 Madison St., Sharon. Possessing two grey squirrels over daily limit	20.00
Scelsi, Michael, 309 Madison St., Sharon. Possessing one gray squirrel over daily limit	10.00
Smith, Jr., James, 301 Fairfield Ave., New Castle. Hunting ducks with shotgun not plugged	10.00
Sparks, Homer H., 1244 E. State St., Sharon. Killing pheasant hen in close season	25.00
Swartzback, Clifford N., R. D. No. 4, Greenville. Shooting at wild duck after closing time	15.00
Tamber, Frank J., 1027 Hamilton Ave., Farrell. Shooting across highway while hunting	25.00
Warwick, Ralph N., 47 Council St., Wheatland. Possessing pheasant hen in closed season	25.00

McKEAN—\$415

Autieri, Victor V., 27 Roberts St., Bradford. Possessing parts of doe deer taken in closed season	100.00
Caruso, Frank J., 193½ W. Washington St., Bradford. Possessing parts of doe deer taken in closed season	100.00
Cochran, Leo O., Turtle Point. Hunting without resident license	20.00
Corine, Louis F., 13 S. Center St., Bradford. Possessing parts of deer in closed season	100.00
Furlong, James M., Clermont. Possessing grouse taken in close season	25.00
Higley, Richard L., R. D. No. 2, Port Allegany. Possessing loaded rifle in vehicle standing along highway	10.00
Kuret, Frank J., Jr., R. D. No. 2, Bradford. Possessing loaded shotgun in vehicle standing along highway	10.00
McDonald, Okley C., Eldred. Possessing loaded rifle in vehicle standing along highway	10.00
McGinnis, Don, Degolia. Attempting to kill protected bird	10.00
McCullough, James E., 640 Tionesta Ave., Kane. Killing wood duck prior to opening hour	15.00
Savoldi, Joseph F., 15 Farley St., Kane. Hunting ducks prior to opening hour	15.00

MIFFLIN—\$325

Britt, Thomas J., Jr., 225 N. Main St., Yeagerstown. Hunting rabbits on State Game Propagation Area	25.00
Byler, Lester S., R. D. No. 1, Belleville. Failure to show license on demand	20.00
Copenhaver, Lewis C., Reedsville. Possessing loaded rifle in vehicle in motion on highway	25.00
Goodwin, Almeda, Woodland, Reedsville. Possessing loaded shotgun in vehicle standing along highway	10.00
Goodwin, Charles H., Reedsville. Possessing loaded shotgun in vehicle standing along highway	10.00
Hendricks, John T., 100 S. Main St., Lewistown. Possessing loaded rifle in vehicle in motion on highway	25.00
Hostetler, Christian S., Reedsville. Shooting within 150 yards of occupied building	25.00
Kearns, Howard J., 313 Main St., Lewistown. Hunting within 150 yards of occupied building	25.00
Ramsey, Harry F., 507 Freedom Ave., Burnham. Shooting at unprotected target during big game season	10.00
Reed, George R., R. D. No. 1, Reedsville. Hunting and pursuing wild animals in safety zone	25.00
Shatzer, Shealy A., 205 S. Brown St., Lewistown. Hunting rabbits on State Game Propagation Area	25.00
St. Clair, George A., R. D. No. 2, Lewistown. Hunting squirrels between 5 p.m. and 7 a.m.	15.00
Watson, Charles A., 10 N. Mann St., Yeagerstown. Hunting rabbits on State Game Propagation Area	25.00
Watson, John R., 10 N. Mann Ave., Yeagerstown. Hunting rabbits on State Game Propagation Area	25.00
Watson, Robert E., 10 N. Mann Ave., Yeagerstown. Hunting rabbits on State Game Propagation Area	25.00
Young, Jack E., Sandy Run Rd., R. D. No. 1, Altoona. Hunting ringneck pheasants between 5 p.m. and 7 a.m.	10.00

MONROE—\$645

Anthony, Chester L., R. D. No. 1, Stroudsburg. Possessing loaded shotgun in vehicle in motion on highway	25.00
Boreheck, George J., 94—2nd St., Stroudsburg. Hunting game prior to opening hour first day	15.00
Brinker, Milton R., Canadensis. Killing male deer in closed season; possessing male deer taken in close season	200.00
Capone, Philip, 80—2nd St., Stroudsburg. Possessing loaded rifle in vehicle standing on highway	10.00
Capone, Richard, 802—2nd St., Stroudsburg. Possessing loaded rifle in vehicle standing on highway	10.00
Hanlein, Elmer W., Box 43, Delaware Water Gap. Killing game between 5 p.m. and 7 a.m.	15.00
LaBadie, Andrew Phillip, R. D. No. 2, E. Stroudsburg. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
LaBadie, Robert C., 362 Lincoln Ave., E. Stroudsburg. Hunting, pursuing or disturbing wild birds or animals in safety zone; Hunting rabbits with a shotgun containing more than three (3) shells	35.00
Marsh, Fred, 147—9th St., Stroudsburg. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Miller, Henry E., 26 Stofflet St., Stroudsburg. Possessing shotgun shell with single ball, not securely wrapped in vehicle standing on highway between 5 p.m. and 7 a.m.	10.00
Miller, Henry H., 1128 Greenway Ave., Stroudsburg. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Miller, Howard A., R. D. No. 2, E. Stroudsburg. Attempting to kill deer in closed season	100.00
Nauman, Joel E., Cresco. Possessing loaded shotgun in vehicle in motion	25.00
Shoosmith, William, Canadensis. Possessing parts of deer in close season	100.00
Smith, Willard G., 364 Lincoln Ave., E. Stroudsburg. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00

MONTGOMERY—\$1,550

Adkins, John Jr., 100 W. Elm St., Conshohocken. Possessing loaded rifle in vehicle standing on highway	10.00
Alderfer, Jeremiah S., R. D. No. 4, Pottstown. Hunting without resident license	20.00
Baldwin, Kenneth W., 530 Walnut St., Pottstown. Pursuing, hunting or disturbing wild birds or game animals in safety zone	25.00

Beasley, Clark R., 323 Grant St., Pottstown. Hunting within 150 yards of occupied building	25.00
Beasley, Gordon, 337 Lincoln Ave., Pottstown. Hunting within 150 yards of occupied building	25.00
Beekly, Herbert, 305 Elm St., Pottstown. Hunting within 150 yards of occupied building	25.00
Biddy, Edward C., R. D. No. 1, Wayne. Hunting without resident license	20.00
Boyer, Theodore R., Salfordville. Possessing loaded shotgun in vehicle standing on highway	10.00
Brenz, John H., R. D. No. 2, Schwenksville. Hunting without resident hunting license	20.00
Cast, Charles K., 204 High St., Pottstown. Hunting within 150 yards of occupied building	50.00
Confer, John William, 1157 Sout St., Pottstown. Hunting within 150 yards of occupied building	25.00
Cronrath, Howard Oelschlager, Salfordville. Hunting without resident license	20.00
Dames, Edward I., 223 Penns St., Pottstown. Shooting at unprotected target in big game season	10.00
Difenderfer, Elmer Grant, R. D. No. 1, Gilbertsville. Possessing one male pheasant over daily limit	25.00
Eyler, Jack P., 217 Trent Rd., Penn Wynne. Shooting within 150 yards of occupied building	25.00
Ferrier, Joseph, Cedar Grove Road, Conshohocken. Shooting within 150 yards of occupied building	25.00
Fontana, Anthony P., 22 Elm St., Stowe. Shooting at unprotected target in big game season	10.00
Fretz, Edward Robert, Moyers Road, Hatfield. Hunting game squirrels between 5 p.m. and 7 a.m.	25.00
Frey, Lewis R., 1 W. 4th St., Pottstown. Hunting, pursuing wild birds or disturbing them in safety zone	25.00
Groff, Stanley A., Souderton. Shooting across highway while hunting game	25.00
Grubb, Ethel M., 318 Spring St., Royersford. Hunting, pursuing or disturbing wild birds or animals in safety zone	25.00
Hoffman, Robert C., Broadway, Hatboro. Possessing loaded rifle in vehicle in motion	25.00
Kavatto, John V., R. D. No. 3, Mill Park, Pottstown. Hunting within 150 yards of occupied building	25.00
Keon, Thomas H., R. D. No. 1, Ambler. Hunting without resident license	20.00
Kerlin, Daniel Difenderfer, 649 Summit Lane, Pottstown. Failure to produce identification on demand of officer	20.00
Kidd, Alvin D., R. D. No. 1, Wayne. Hunting without a resident hunting license	20.00
Kolarz, Frank C., 520 Grant St., Pottstown. Possessing a loaded rifle in vehicle standing along highway; Hunting within 150 yards of occupied building	35.00
Kreisher, George, 6 Potter St., Lacey Park, Hatboro. Hunting without resident license	20.00
Landis, Norman F., R. D. No. 2, Telford. Hunting without resident license	20.00
McDevitt, Melvin G., 1 Park Ave., Willow Grove. Hunting without resident license	20.00
McDevitt, William J., 108 N. York St., Pottstown. Hunting game prior to the opening hour first day	15.00
McDevitt, Paul C., 1 Park Ave., Willow Grove. Lending license to another	20.00
Maguire, John Francis, 444 Depot St., Bridgeport. Hunting without a resident hunters license	20.00
Mentzer, Russell M., R. D. No. 1, Royersford. Hunting without resident license	20.00
Metzer, John Walter, Welsh Rd., Huntingdon Valley. Using an automobile to hunt, take, kill or wound a rabbit	50.00
Meyers, George C., 954 Queen St., Pottstown. Hunting within 150 yards of occupied building	25.00
Michener, Sr., William H., 555 Kohn St., Norristown. Shooting upon institution property or lands	25.00
Minier, Clayton J., 661 Sandy St., Norristown. Possessing deer more than 60 days after the close of season	50.00
Mourer, Walter E., Stowe. Shooting at unprotected target in big game season	10.00
Mourer, William A., Stowe. Shooting at unprotected target in big game season	10.00
Moyer, Francis Laverne, 648 Chestnut St., Pottstown. Hunting within 150 yards of occupied building	25.00
Moyer, Sr., Lawrence N., 610 Grant St., Pottstown. Hunting within 150 yards of occupied building	25.00
Nester, Edwin K., 610 Grant St., Pottstown. Hunting within 150 yards of occupied building	25.00
Nester, Edwin S., 875 Queen St., Pottstown. Hunting within 150 yards of occupied building	25.00
O'Dell, Donald J., 116 N. Keim St., Pottstown. Hunting within 150 yards of occupied building	25.00
Okamski, Frank Joseph, Erie Ave., Telford. Hunting game between 5 P. M. and 7 A. M.	25.00
Palmer, Donald F., 24 Dallas Rd., Willow Grove. Killing rabbit in close season; hunting rabbits between 5 P. M. and 7 A. M.; using artificial lights to take rabbits	35.00
Reinert, William Henry, R. D. No. 2, Lansdale. Shooting within 150 yards of occupied building	25.00
Ritter, Robert T., R. D. No. 4, Pottstown. Hunting within 150 yards of occupied building	25.00
Robinson, Clark W., 128 Warren St., Pottstown. Shooting within 150 yards of occupied building	25.00
Rush, Wilmer W., Box 94, Morwood. Shooting within 150 yards of occupied building	25.00
Sefing, Leonard, Main St., Souderton. Hunting game between 5 P. M. and 7 A. M.; shooting within 150 yards of occupied building	40.00
Shaw, Robert G., 309 Maple Ave., Wyncote. Killing game before 7 A. M.	15.00
Sheridan, LeRoy A., 110 W. Elm St., Conshohocken. Possessing loaded rifle in vehicle standing on highway	10.00
Skrzat, Anthony, R. D. No. 2, Telford. Hunting game between 5 P. M. and 7 A. M.	15.00
Smith, Edward G., 310 W. 6th St., Conshohocken. Hunting with firearms while under the influence of liquor	25.00
Smith, Franklin H., 618 Cherry St., Norristown. Hunting without resident license	20.00
Sosa, Raymond J., Limerick. Hunting without resident license	20.00
Swinehart, Samuel S., R. D., Gilbertsville. Hunting without a resident license	20.00
Whitacre, Charles F., 48 E. 5th St., Pottstown. Hunting within 150 yards of occupied building	25.00

Wireman, Harold F., 212 Chestnut St., Souderton. Hunting without resident license; hunting game between 5 P. M. and 7 A. M.; using auto to hunt game by night by use of automobile lights .. 85.00
 Yocum, Lawrence C., 1 W. Fifth St., Pottstown. Hunting within 150 yards of occupied building 25.00
 Yoder, Daniel M., R. D. No. 1, Bechtelville. Hunting game prior to opening hour first day 15.00
 Yoder, Stanley L., R. D. No. 1, Bechtelville. Hunting game prior to opening hour first day 15.00

MONTOUR—\$35.00

Hartline, Robert Homer, Washingtonville. Possessing one squirrel over daily limit 10.00
 Heim, Edwin E., 702 East Front St., Danville. Allowing dog to pursue game on safety zone 25.00

NORTHAMPTON—\$380.00

Beltz, Stanley J., R. D. No. 1, Bath. Permitting dog to enter state game area 25.00
 Callone, Andrew E., 706 4th St., Bethlehem. Possessing loaded rifle in vehicle in motion on highway 25.00
 Cotonzare, Jr., Frank, 726 Berwick St., Easton. Possessing loaded rifle in vehicle standing along highway 10.00
 Emes, Irvin Patterson, 839 Penn Ave., Pen Argyl. Shooting within 150 yards of occupied building 25.00
 Gable, Richard R., R. D. No. 2, Walnutport. Damaging property of State Game Lands; shooting at target more than 200 yards from camp in big game season 35.00
 Haag, John Henry, 2223 Forrest St., Easton. Shooting at unprotected target in big game season 10.00
 Horvath, John, R. D. No. 4, Easton. Shooting within 150 yards of occupied building 25.00
 Kern, Clay Douglas, 410 Messenger St., Bangor. Failure to visit trap within 36 hours 10.00
 Lambert, Russell W., R. D. No. 2, Bath. Entering Auxiliary state game area with firearm 25.00
 Miller, Edgar L., 1755 Washington Ave., Northampton. Possessing loaded shotgun in vehicle standing on highway 10.00
 Morey, William B., 23 N. Main St., Nazareth. Failure to display license tag while hunting 20.00
 Oplinger, Newton J., R. D. No. 1, Northampton. Destroying trees on State Game Lands 25.00
 Pellen, Henry F., 3344 Butler St., Easton. Failure to display license tag while hunting 20.00
 Reimer, Carl C., R. D. No. 2, Bath. Hunting without resident license 20.00
 Seifert, Earl L., 9 N. Mulberry St., Easton. Possessing loaded shotgun in vehicle in motion on highway 25.00
 Sipel, Edgar Harold, Portland. Possessing loaded shotgun in vehicle in motion on highway 25.00
 Supers, Albert E., R. D. No. 1, Bangor. Possessing loaded shotgun in vehicle standing along highway 25.00
 Tadora, Santo H., 1 Spring St., Nazareth. Shooting within 150 yards of occupied building 25.00

NORTHUMBERLAND—\$325.00

Brehm, Wesley E., R. D. No. 1, Turbotville. Possessing loaded shotgun in vehicle standing along highway 10.00
 Comfort, George Walter, R. D. No. 3, Sunbury. Hunting rabbits with shotgun containing more than 3 shells 10.00
 Coveleski, Ray Edward, 3 Brady St., Ranshaw. Lending hunting license and tag to another 20.00
 Einsig, Raymond George, 89 Penn St., Milton. Shooting game namely a ringneck pheasant in safety zone 25.00
 Geiser, Chester C., 179 S. 10th St., Sunbury. Possessing loaded rifle in vehicle standing on highway 10.00
 Guttie, Edward C., 108 2nd St., Ranshaw. Hunting without license 20.00
 Jenkyns, James R., 1331 W. Arch St., Shamokin. Hunting game prior to opening hour first day 15.00
 Kuznicki, Norbert, 148 E. Columbia Ave., Atlas. Hunting wild birds or animals in safety zone with dogs and gun 25.00
 Kuznicki, Stanley, 148 E. Columbia Ave., Atlas. Failure to show hunters license on demand of officer 20.00
 McCahan, John Williams, 208 Spruce St., Sunbury. Attempting to kill a ringneck pheasant over daily bag limit 25.00
 McCarthy, John Paul, 144½ S. Front St., Milton. Shooting within 150 yds. of occupied building 25.00
 Rego, Joseph Pasco, Trevorton. Shooting within 150 yds. of occupied building 25.00
 Snyder, Earl C., 701 Elm St., Watsonstown. Shooting within 150 yds. of occupied building 25.00
 Tamalonis, Joseph E., 203 S. Gage St., Mt. Carmel. Making false statement to secure a hunting license 20.00
 Thomas, Milton D., 418 W. 3rd St., Mt. Carmel. Failure to show hunters license on demand of officer 20.00
 Wachoskie, Stanley T., 108 2nd St., Ranshaw. Lending hunting license and tag to another 20.00
 Whary, Herbert M., Box 65, R. D. No. 1, Shamokin. Shooting at unprotected target in big game season 10.00

PERRY—\$85.00

Boggs, Lee L., R. D. No. 2, New Bloomfield. Transporting untagged deer 25.00
 Frederick, Ronald L., R. D. No. 1, Millerstown. Shooting within 150 yds. of occupied building 25.00
 Rapp, John M., Millerstown. Failure to tag deer within one hour after killing 10.00
 Sterner, Joseph M., R. D. No. 2, Duncannon. Shooting within 150 yds. of occupied building 25.00

PHILADELPHIA—\$1,971.00

Ball, Joseph L., 2143 Medary Ave., Philadelphia 38. Shooting within 150 yds. of occupied building 25.00
 Bontempo, Peter N., 1320 N. 52nd St., Philadelphia. Hunting without resident license 20.00
 Brown, Lester C., Jr., 810 North Winson Squair, Philadelphia. Possessing a loaded rifle in vehicle standing along highway 10.00
 Brown, Leonard R., 1530 N. 4th St., Philadelphia. Hunting without resident license 20.00
 Burke, Andrew A., 2928 S. Fifteenth St., Philadelphia. Transporting parts of big game unmarked 25.00
 Calabrese, Kenneth F., 1162 S. 10th St., Philadelphia. Hunting game before opening hour first day 15.00
 Canning, James P., 2360 N. Colorado St., Philadelphia. Hunting without resident license 20.00

Cannon, William D., 5169 Jefferson St., Philadelphia. Possessing protected bird 10.00
 Carter, William H., 1921 George St., Philadelphia. Killing ringneck pheasant hen; Shooting within 150 yds. of occupied building 50.00
 Catricks, Sam G., 2948 Fanshawe St., Philadelphia. Possessing loaded shotgun in vehicle in motion on highway 25.00
 Chebra, John, 4214 N. Franklin St., Philadelphia 40. Hunting wild birds or animals in safety zone 25.00
 Clair, Jr., James F., 4535 N. Front St., Philadelphia. Shooting at unprotected target in big game season 10.00
 Clair, Sr., James F., 4535 N. Front St., Philadelphia. Shooting at unprotected target in big game season 10.00
 Console, Gabriel J., 5171 Jefferson St., Philadelphia. Hunting game prior to opening hour first day 15.00
 Cox, William, 6511 Gesner St., Philadelphia 42. Defacing Commission sign on Farm-Game Project 10.00
 Darigo, Salvator, 1029 S. 9th St., Philadelphia. Possessing loaded shotgun in vehicle used as a blind to kill game 25.00
 Davidonis, Charles P., 2327 Brown St., Philadelphia. Hunting within 150 yds. of occupied building 25.00
 Dennis, Norman, 5146 Harlan St., Philadelphia 31. Killing wild ducks in closed season 60.00
 DiGrazio, Joseph, 1701 S. Front St., Philadelphia. Shooting within 150 yds. of occupied building 25.00
 Dunning, Peter S., 7806 Cresheim Rd., Philadelphia. Hunting without resident license 20.00
 Farina, John J., 319 E. Walnut Lane, Philadelphia 44. Possessing loaded rifle in vehicle on highway twice 50.00
 Franzreb, Thomas G., 1502 Old Gulph Rd., Villanova, Phila. Hunting game prior to opening hour first day 15.00
 Gallagher, Terry V., 732 E. Woodlawn, Philadelphia. Hunting rabbits with an automatic firearm 10.00
 Garner, Joseph D., 7142 Shellbourne St., Philadelphia. Shooting within 150 yds. of occupied building 25.00
 Gordon, Walter J., 3304 S. 20th St., Philadelphia. Hunting game between 5 P. M. and 7 A. M. 15.00
 Gradel, Eugene G., 7151 Litman St., Philadelphia. Possessing loaded rifle in vehicle standing on highway 10.00
 Johnson, Albert H., 7225 Jackson St., Philadelphia. Possessing loaded shotgun in vehicle in motion on highway 25.00
 Johnson, Bernie, 1521 N. 13th St., Philadelphia. Killing pheasant hen 25.00
 Johnson, Donald, 3409 S. 87th St., Philadelphia. Hunting game after hours 15.00
 Jones, Willard R., 8708 Erwig Ave., Philadelphia. Hunting game after hours 15.00
 Kallus, Paul J., Willits & Ashton Sts., Philadelphia. Hunting without resident license 20.00
 Kerstetter, Catherine L. (Mrs.), 2129 W. Venango St., Philadelphia. Hunting without resident license 20.00
 Knitter, Paul J., 355 Stevens St., Philadelphia. Possessing parts of deer in close season; Killing deer with gun propelling more than 1 ball at a time 200.00
 Largent, Allen D., 1823 N. Waterloo St., Philadelphia. Shooting at unprotected target in big game season 10.00
 Leffel, William F., 235 S. 41st St., Philadelphia. Possessing loaded shotgun in vehicle standing along highway 10.00
 Lomax, Andres L., 3854 Brown St., Philadelphia 4. Assisting to conceal a deer taken unlawfully and killed 100.00
 Lovering, Talbot D., 154 Bethlehem Pike, Chestnut Hill, Philadelphia. Hunting without resident license 20.00
 Lozowicki, Edward, 3215 Glenview St., Philadelphia. Hunting, pursuing wild birds and animals in safety zone 25.00
 Malsnee, Richard, 6109 Market St., Philadelphia 39. Killing 6 wild ducks in close season 60.00
 Marcolina, Felix A., 129 E. Mermaid Lane, Philadelphia. Hunting wild birds or animals in safety zone 25.00
 Miller, Walter L., 3328 Fox St., Philadelphia. Shooting within 150 yds. of occupied building 25.00
 Mobley, King B., 2119 W. York St., Philadelphia. Attempting to kill a ringneck hen pheasant 25.00
 Murray, William J., 3105 Midvale Ave., Philadelphia. Hunting game before opening hours first day 15.00
 New, Douglas E., 452 E. Memphis St., Philadelphia. Possessing loaded rifle in vehicle standing on highway 10.00
 Orth, John F., 1931 W. Tioga St., Philadelphia. Hunting game prior to opening hour first day 15.00
 Payne, Herbert L., 1667 Kinsley St., Philadelphia. Possessing loaded shotgun in vehicle standing on highway; killing game between 5 P. M. and 7 A. M. 25.00
 Peavy, William C., 2721 N. 11 St., Philadelphia. Shooting at squirrels not plainly visible 10.00
 Perrone, Alessio, 1125 Dickenson St., Philadelphia. Possessing loaded rifle in vehicle on highway in motion; failure to sign hunters license 26.00
 Rittenhouse, Lawrence C., 6226 Wissahickon Drive, Philadelphia. Possessing loaded rifle in vehicle in motion on highway 25.00
 Robinson, Wade, 1739 Lombard St., Philadelphia 48. Possessing parts of deer killed in closed season 100.00
 Scheerbaum, John Adolph, 3356 Princeton Ave., Philadelphia. Hunting without resident license 20.00
 Seyther, Albert A., 656 E. Sanger St., Philadelphia 20. Hunting without resident license; taking 8 muskrats in close season .. 100.00
 Shelton, John J., 5540 Thompson St., Philadelphia. Transporting deer killed in close season 100.00
 Siedlecki, Edward J., 854 N. 29th St., Philadelphia. Hunting game on State Game Propagation Area 25.00
 Solow, Herman Keeve, 1977 Church Lane, Philadelphia. Possessing loaded rifle in vehicle in motion on highway 25.00
 Spano, Anthony, 712 S. Delhi St., Philadelphia. Possessing protected bird 10.00
 Suber, James, 1232 W. Oxford St., Philadelphia. Killing ringneck pheasant hen 25.00
 Sulkowski, Henry, 2118 E. Indian Ave., Philadelphia. Hunting, pursuing wild birds or animals in safety zone 25.00
 Sulkowski, Logan J., 4534 E. Stiles St., Philadelphia. Hunting, pursuing or disturbing wild birds and animals in safety zone .. 25.00
 Suski, Eugene J., 1848 Brunner St., Philadelphia. Possessing loaded shotgun in vehicle standing on highway 10.00
 Sweeney, Joseph V., 2133 Chew St., Philadelphia. Possessing hen pheasant 25.00
 Trate, Joseph E., 7307 Briar Road, Philadelphia. Possessing a loaded rifle in vehicle standing on highway 10.00

Vacca, Joseph F., 3901 N. Marshal St., Philadelphia. Killing protected bird 10.00
 Verna, Joseph J., 673 E. Garver St., Philadelphia 20. Hunting without resident license; taking 8 muskrat in closed season 100.00
 Verrocchio, John J., 3901 N. 6th St., Philadelphia. Killing protected bird 10.00
 Wantorchik, Raymond J., 6022 Greenway Ave., Philadelphia 42. Killing ringneck pheasant hen 25.00
 Wilson, Robert, 2811 N. 13th St., Philadelphia. Shooting at unprotected target in big game season 10.00

PIKE—\$95.00

Botjer, Henry M., Greentown. Hunting without resident license .. 20.00
 Brucher, Otto, Milford. Hunting small game in party of more than 5 persons 5.00
 Clark, Boyd E., Blooming Grove. Killing ringneck pheasant hen 25.00
 Lush, George L., Milford. Unlawfully transporting a game animal out of state 10.00
 Ross, John, Greeley. Unlawfully transporting game animal out of state 10.00
 Wright, Morgan J., Greentown. Possessing loaded rifle in vehicle in motion on highway 25.00

POTTER—\$110.00

Gaigel, James, R. D. No. 1, Genessee. Alien possessing shotgun .. 25.00
 Haines, Clyde, R. D. No. 1, Shinglehouse. Possessing deer more than 60 days after close of season 50.00
 Petrie, Philip H., R. D. No. 1, Roulette. Hunting injuring livestock (guinea hens) 25.00
 Stewart, Larence W., R. D. No. 1, Austin. Failure to visit traps within 36 hours 10.00

SCHUYLKILL—\$2,500.00

Adams, Lester L., Orwin. Hunting with firearm not properly accompanied when under 16 years of age 20.00
 Alutius, Joseph F., 1122 E. Grand Ave., Tower City. Shooting within 150 yards of occupied building 25.00
 Applegate, Ralph M., Delano. Assisting in using artificial light to take rabbit; hunting game between 5 P. M. and 7 A. M. 25.00
 Benedict, James M., 589 W. Railroad St., Pottsville. Hunting without resident license 20.00
 Benjamin, Thomas F., 62 N. Sheridan St., McAdoo. Hunting small game in party of more than 5 persons 5.00
 Bennett, James N., 10 Pike St., Port Carbon. Hunting small game in party of more than 5 persons 5.00
 Bennett, William N., 10 Pike St., Port Carbon. Hunting small game in party of more than 5 persons 5.00
 Bobarsky, Anthony E., 415 Elm St., Tamaqua. Aiding and assisting in the concealment of bear unlawfully taken 200.00
 Bugajinsky, Frank V., Marlin. Hunting game between 5 P. M. and 7 A. M. 15.00
 Bushman, George S., Morea Colliery. Entering Auxiliary State Game Refuge with firearm in open game season 25.00
 Charles, William T., 15 E. Carbon St., Minersville. Hunting rabbits between 5 P. M. and 7 A. M. 15.00
 Chesonis, Alex E., 18 N. Carbon St., Shenandoah. Hunting small game in party of more than 5 persons 5.00
 Gibas, Joseph G., 401 Pine St., Tamaqua. Aiding and assisting in the concealment of bear unlawfully taken 200.00
 Cooper, Louis D., 534 E. Elm St., Tamaqua. Hunting small game in party of more than 5 persons 5.00
 Dallage, Albert J., 125 Walnut St., Marlin. Possessing ringneck hen 25.00
 Dallage, Joseph J., Walnut St., Marlin. Assisting to conceal hen pheasant unlawfully killed 25.00
 Fritz, Harry O., Carbon St., Pine Grove. Possessing loaded shotgun in vehicle standing on highway 10.00
 Hasz, Roy D., 72 S. Main St., Pine Grove. Possessing loaded shotgun in vehicle standing on highway 10.00
 Hoffman, Charles W., R. D. No. 2, Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00
 Hubler, Irvin R., 747 Water St., Pottsville. Hunting rabbits between 5 P. M. and 7 A. M. 15.00
 Judas, Albert J., 133 Green St., Shenandoah. Hunting small game in party of more than 5 persons 5.00
 Kalish, Peter F., 109 S. Cleveland St., McAdoo. Hunting small game in party of more than 5 persons 5.00
 Kehres, Roland J., Lavelle. Hunting rabbits between 5 P. M. and 7 A. M. 15.00
 Kislock, Joseph, 420 Nice St., Frackville. Killing a protected bird 10.00
 Kondash, John A., 41 E. Washington St., McAdoo. Killing a protected bird 10.00
 Kranch, William H., 704 W. Spruce St., Mahanoy City. Hunting within 150 yards of occupied buildings 25.00
 Lazur, George J., R. D. No. 2, Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00
 Lazur, Thomas S., R. D. No. 2, Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00
 Lubinsky, William J., Combola. Hunting without resident license 20.00
 Lurwick, Jacob, 14 Market St., Port Carbon. Hunting small game in party of more than 5 persons 5.00
 Lurwick, John E., 106 Market St., Port Carbon. Hunting small game in party of more than 5 persons 5.00
 Lurwick, Vincent J., 341 E. Morwegian St., Pottsville. Hunting small game in party of more than 5 persons 5.00
 Lurwick, William B., 10 S. Market St., Port Carbon. Hunting small game in party of more than 5 persons 5.00
 Mahalchick, John, Walnut St., Marlin. Assisting to conceal game unlawfully killed 25.00
 Malick, Wilbert R., Good Spring. Giving false information to secure a resident hunting license 20.00
 Mattock, Andrew J., Silver Creek, New Philadelphia. Hunting within 150 yds. of occupied building 25.00
 McAloose, Carl S., McAdoo. Hunting small game in party of more than 5 persons 5.00
 McAloose, Naon't J., McAdoo. Hunting small game in party of more than 5 persons 5.00
 Mikita, George, 19 S. Franklin St., Shenandoah. Hunting small game in party of more than 5 persons 5.00
 Miller, Robert J., Hegins. Hunting without resident license .. 20.00
 Neuin, Sylvester A., 109 Parkway, Schuylkill Haven. Possessing loaded shotgun in vehicle in motion on highway 25.00
 Novatka, Stanley, 537½ E. Centre St., Shenandoah. Hunting small game in party of more than 5 persons 5.00
 Paruch, John S., 607 W. New York St., Shenandoah. Hunting small game in party of more than 5 persons 5.00

Patrick, Albert, R. D. 3, Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00
 Potosky, Edward A., 428 Elm St., Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00
 Potosky, John W., 428 Elm St., Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00
 Roscoe, Michael A., 22 North St., Minersville. Hunting game within 150 yds. of occupied building 25.00
 Sherman, John W., Main St., Lavelle. Hunting squirrel between 5 P. M. and 7 A. M. 15.00
 Springer, Charles W., 116 N. Berry St., Schuylkill Haven. Shooting within 150 yds. of occupied building 25.00
 Stefancavage, Anthony, Zion Grove. Possessing loaded rifle in vehicle standing on highway 10.00
 Steimling, Allen W., Delano. Using artificial light to take rabbit; hunting game between 5 P. M. and 7 A. M. 25.00
 Stidham, Franklin, 5536 E. Elm St., Tamaqua. Hunting small game in party of more than 5 persons 5.00
 Stoppi, John, 19 S. Franklin St., Shenandoah. Hunting small game in party of more than 5 persons 5.00
 Whalen, Walter M., Pottsville. Hunting within 150 yds. of occupied building 25.00
 Willing, John E., 107 Greenwood St., Coaldale. Possessing loaded rifle in vehicle standing on highway 10.00
 Wisniewski, Frank E., 539 E. Centre St., Shenandoah. Hunting small game in party of more than 5 persons 5.00
 Yeager, Joseph A., Jr., 409 W. Market St., Mahanoy City. Hunting without resident license 20.00
 Zedonek, John, 205 Walnut St., Marlin. Transporting hen pheasant unlawfully killed 25.00
 Zeird, Clement W., 204 Clay St., Tamaqua. Aiding and assisting in the concealment of a bear unlawfully taken 200.00

SNYDER—\$265.00

Bateman, Moses A., Penns Creek. Hunting in a Special Wildlife Refuge 25.00
 Fetterolf, Sherman C., R. D. No. 1, Middleburg. Possessing parts of deer killed in closed season 100.00
 Overguard, Halvdan, 110 So Market St., Selinsgrove. Making false statement to secure hunting license 20.00
 Snook, Donald H., Kreamer. Shooting at target more than 200 yds. from camp in big game season 10.00
 Spigelmeyer, John S., R. D. No. 1, Selinsgrove. Throwing artificial light upon deer while in possession of a firearm 100.00
 Yerger, Guy R., Kreamer. Shooting at target more than 200 yds. from camp during big game season 10.00

SOMERSET—\$1,120.00

Allison, Herbert, R. D. No. 1, Windber. Possessing raccoon in close season 25.00
 Berkebile, Garner, Hooversville. Hunting wild animals in safety zone 25.00
 Brant, Allen M., R. D. No. 1, Garrett. Possessing parts of deer in close season 100.00
 Cramer, Ephraim W., R. D. No. 2, Somerset. Shooting within 150 yds. of occupied building 25.00
 Crosby, Kenneth W., R. D. No. 1, Rockwood. Hunting rabbits with shotgun containing more than 3 shells 10.00
 Deist, Joseph M., Boswell. Possessing loaded rifle in vehicle standing along highway 10.00
 Dugan, Emerson Dewey, R. D. No. 4, Somerset. Hunting without resident license 20.00
 Faulkner, George, Jr., Hooversville. Hunting wild animals in safety zone 25.00
 Ferre, Donald, Holsopple. Possessing a rabbit taken in close season 10.00
 Gary, Paul J., R. D. No. 1, Markleton. Possessing mink taken in close season; Hunting game prior to the opening hour first day 25.00
 Griffith, Howard, R. D. No. 5, Somerset. Assisting to kill livestock 25.00
 Horning, Leighton, R. D. No. 1, Windber. Hunting game prior to opening hour first day 15.00
 Huber, Louis M., Tire Hills. Hunting without resident license .. 20.00
 Knopsnyder, Edward L., R. D. No. 1, Grantsville. Possessing deer more than 60 days after close of season 50.00
 Knopsnyder, Ruben W., R. D. No. 1, Markleton. Possessing deer more than 60 days after close of season 50.00
 Kunkle, Emory W., Jones Mills. Hunting small game in party of more than five persons 5.00
 Kunkle, Gilbert M., Donegal. Hunting small game in party of more than five persons 5.00
 Kunkle, Roy J., Jones Mills. Hunting small game in party of more than five persons 5.00
 Kunkle, Wenzle E., Jones Mills. Hunting small game in party of more than five persons 5.00
 Lafferty, Walter C., Listie. Killing cub bear in close season ... 200.00
 LaPlace, Leonard F., 1903 Cambria Ave., Windber. Entering auxiliary state game refuge with firearm 25.00
 Livingood, Weldon F., Corner Main & Chestnut Sts., Rockwood. Possessing deer taken in close season 100.00
 Ogline, Earl L., R. D. No. 5, Somerset. Hunter killing livestock .. 25.00
 Pacifici, Antonio, Box 244, Ralphton. Hunting wild animals in safety zone 25.00
 Romesburg, Scott N., R. D. No. 1, Markleton. Possessing one gray squirrel over daily limit 10.00
 Shaffer, Hugh, R. D. No. 1, Windber. Hunting small game in party of more than five persons 5.00
 Shaffer, Lewis, 364 W. Fairview St., Somerset. Assisting to kill livestock 25.00
 Shaulis, Elmer R., Jr., R. D. No. 2, Rockwood. Killing deer in close season 100.00
 Shroyer, Fred, Hooversville. Hunting while hunting rights have been denied 40.00
 Shuster, Louis, Holsopple. Possessing rabbit taken in closed season 10.00
 Simone, Anthony L., 1716 Veil Ave., Windber. Hunting without license 20.00
 Smith, Charles G., R. D. No. 4, Somerset. Hunting small game in party of more than five persons 5.00
 Smith, William F., R. D. No. 4, Somerset. Hunting small game in party of more than five persons 5.00
 Springer, Francis J., Holsopple. Issuing hunters license without satisfactory identification 20.00
 Tallion, Joe, 761 Mine 37, Windber. Hunting small game in party of more than five persons 5.00
 Testerman, Edward E., 319 Center St., Boswell. Hunting prior to 9 A. M. on opening day of small game season 15.00
 Tomke, Andy S., Sr., R. D. No. 2, Stoystown. Hunting wild animals in safety zone 25.00

SULLIVAN—\$145.00

Bryan, Adam, Hills Grove. Killing one turkey in closed season	25.00
Elchak, Michael T., Lopez. Failure to produce head of deer upon demand	100.00
Phillips, Stanton L., R. D. No. 1, Muncy Valley. Hunting without resident license	20.00

SUSQUEHANNA—\$750.00

Baker, Walter L., R. D. No. 4, Susquehanna. Possessing parts of deer in closed season	100.00
Barney, Clifton D., Nicholson, Star Route. Failure to tag trap	10.00
Bennett, Clayton, R. D. No. 2, Hallstead. Possessing parts of deer in closed season	100 days
Decker, Charles M., Box 159, Hallstead. Failure to report shooting accident causing injury to himself	25.00
Feme, Edward J., Susquehanna St., Forest City. Unlawfully transporting game animal out of state	10.00
Fish, Robert M., Jr., R. D. No. 1, Carbondale. Failure to display license tag while hunting	20.00
Jurasko, Thomas J., 317 Delaware St., Forest City. Hunting game between 5 P. M. and 7 A. M.	15.00
Kahrnak, Andrew J., R. D. No. 1, Hop Bottom. Hunting without non-resident license	50.00
Mallory, Gordon E., Jr., Box 176, Lanesboro. Hunting migratory waterfowl with repeating shotgun not plugged to the limit of three shells	10.00
Pennay, Richard J., R. D. No. 1, Kingsley. Possessing parts of deer unlawfully taken	100.00
Richie, Elmer, R. D. No. 2, Springville. Entering State Game Refuge in open game season	25.00
Russell, Kenneth, R. D. No. 2, Springville. Killing bear in state refuge; entering state game refuge in open game season	225.00
Smith, Nelson A., 24 Chenango St., Montrose. Possessing loaded rifle in vehicle standing on highway	10.00
Sterling, Charles J., R. D. No. 2, Hallstead. Hunting game on Sunday	25.00
Van Lovender, Russell, R. D. No. 2, Hallstead. Possessing parts of deer in close season	100.00
Williams, Leon E., Box 23, Lynn. Possessing pheasant hen	25.00

TIOGA—\$285.00

Curren, Duane W., R. D. No. 1, Lawrenceville. Possessing four wild ducks in close season; hunting wild ducks before the opening hour	55.00
Daggett, Merle N., R. D. No. 2, Millerton. Possessing 3 wild ducks in close season; hunting wild ducks before the opening season ..	45.00
David, Martin F., R-2 Wellsboro. Shooting at unprotected target in big game season	10.00
Ferry, Milan, R-6, Wellsboro. Permitting dog under his control to pursue an injured deer	25.00
Flaig, Walter A., R-1, Wellsboro. Setting four traps not tagged ..	40.00
Guilds, Lawrence R., Stephenson St., Westfield. Possessing parts of deer in closed season	100.00
Warriner, Dana F., Tioga St., Wellsboro. Shooting at unprotected target in big game season	10.00

UNION—\$165.00

Catherman, Robert M., R. D. No. 1, Mifflinburg. Hunting without resident license	20.00
Dale, Kermit W., Mifflinburg. Hunting small game in party of more than five persons	5.00
Dale, Margaret M., R. D., Mifflinburg. Hunting small game in party of more than 5 persons	5.00
Dale, William D., R. D. Mifflinburg. Hunting small game in party of more than five persons	5.00
Doebler, William L., Jr., Mifflinburg. Hunting small game in party of more than five persons	5.00
Dorman, Dorsey M., R. D. No. 1, Millmont. Possessing one gray squirrel over limit	10.00
Krantz, Charles J., 101 Broad St., West Milton. Hunting without resident license	20.00
Laudenslager, Fred J., Mifflinburg. Hunting small game in party of more than five persons	5.00
Machesic, Clifford R., R. D. No. 2, Lewisburg. Shooting across highway while hunting rabbits	25.00
Ritter, George E., R. D. No. 1, Windfield. Possessing loaded rifle in vehicle in motion on highway	25.00
VonNeida, Earl C., Hartleton. Hunting squirrels between 5 P. M. and 7 A. M.	15.00
Zehner, Lester W., Glen Iron. Shooting within 150 yards of occupied building	25.00

VENANGO—\$850.00

Beagle, Charles W., R. D. No. 2, Sandy Lake. Possessing loaded rifle in vehicle in motion on highway	25.00
Blair, Harold S., Carlton. Hunting within 150 yards of occupied building	25.00
Blauser, Norman W., R. D. No. 2, Oil City. Possessing parts of deer in close season	100.00
Boar, James K., Cranberry. Possessing part of deer in close season ..	100.00
Brown, Richard, R. D. No. 1, Van. Throwing artificial light on deer while in possession of firearm; failure to stop vehicle upon signal of Game Protector; possessing loaded rifle in vehicle in motion on highway	135.00
Carpenter, Robert R., 9 Hone Ave., Oil City. Assisting to kill deer in closed season	100.00
Dick, Fred J., Clintonville. Hunting game prior to opening hour ..	15.00
Hill, Roy M., 301 E. 4th St., Oil City. Killing grouse in close season ..	25.00
Hornburg, Charles W., 110 High St., Oil City. Training dogs on game while carrying rifle; failure to stop vehicle on signal of Game Protector; turning lights off vehicle to avoid arrest	70.00
Howe, Homer D., R. D. No. 1, Pleasantville. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Jamison, Merle E., R. D. No. 1, Franklin. Failure to stop vehicle upon signal of Game Protector	10.00
Jenkins, Richard L., Polk. Possessing loaded rifle in vehicle in motion on highway	25.00
O'Neill, Richard, R. D. No. 2, Franklin. Possessing loaded rifle in vehicle in motion on highway	25.00
Perry, Edwin, Fertigs. Possessing loaded rifle in vehicle in motion on highway; Throwing artificial light on deer while in possession of firearms	131 days
Peterson, Merle E., R. D. No. 1, Diamond. Possessing parts of deer in close season	100.00

Reid, Albert D., 252 Linden Ave., Oil City. Hunting without resident license	20.00
Schwabauer, Edward R., Hasson Heights, Oil City. Training dogs on game while carrying rifle	10.00
Slater, Loyd E., R. D. No. 2, Oil City. Killing pheasant hen	25.00
Woods, Robert E., 312 Center St., Franklin. Shooting across highway while hunting	25.00

WASHINGTON—\$670.00

Andrews, Leo E., Box 65, Southview. Hunting without resident license	20.00
Antonioni, Ettore L., R. D. No. 1, Washington. Hunting, pursuing, or disturbing wild birds or animals in safety zone	25.00
Balog, John Raymond, R. D. No. 3, Canonsburg. Hunting, pursuing, or disturbing wild birds or animals in safety zone	25.00
Campbell, Richard T., R. D. No. 3, McDonald. Hunting for small game in party of more than five persons	5.00
Capiola, Alex J., R. D. No. 2, Canonsburg. Hunting small game in party of more than five persons	5.00
Capiola, August A., R. D. No. 2, Canonsburg. Hunting small game in party of more than five persons	5.00
Chabassol, Charles T., R. D. No. 3, McDonald. Hunting small game in party of more than five persons	5.00
Chabassol, Edward, Cecil. Hunting game in party of more than 5 persons	5.00
Dantry, Harry L., 404 Blaine Ave., Canonsburg. Hunting small game in party of more than five persons	5.00
Davis, Samuel A., R. D. No. 2, Washington. Shooting within 150 yds. of occupied building	25.00
Devore, Lawrence W., 768 Ellen St., Monongahela. Hunting rabbits between 5 P. M. and 7 A. M.	15.00
Flem, Joseph, Box 334, Ellsworth. Failure to maintain roster of party hunting big game	25.00
Garrett, Raymond P., 623 W. Chestnut St., Washington. Hunting without resident license	20.00
Hennon, George D., 222 Barr St., McDonald. Hunting game between the hours of 5 P. M. and 7 A. M.	15.00
Homme, George O., Ellsworth. Possessing loaded rifle in vehicle standing along highway	10.00
Kapis, Thomas, 890 Union St., Washington. Hunting ducks after hours	15.00
Klages, Charles H., R. D. No. 1, Canonsburg. Hunting without resident license	20.00
Klages, Samuel D., R. D. No. 1, Canonsburg. Hunting without a resident license	20.00
Kortyna, Ralph, R. D. No. 3, Burgettstown. Hunting without a resident license	20.00
Kurty, Joseph, Roscoe. Shooting within 150 yds. of occupied building	25.00
McCalmont, Allison P., Box 88, Hickory. Hunting small game between 5 P. M. and 7 A. M.	15.00
McConnell, Irk A., R. D. No. 3, McDonald. Hunting without resident license	20.00
McConnell, John R., R. D. No. 1, Venetia. Hunting game between 5 P. M. and 7 A. M.	15.00
McGrann, Walter E., R. D. No. 2, Bridgeville. Hunting without resident license	20.00
McVickers, Laurence, 1551 Shadyside Ave., Washington. Killing two rabbits over daily limit	20.00
Murry, Clyde R., 34½ Wayne St., Washington. Killing one rabbit over limit	10.00
Phillips, William H., 167 E. Ave., Washington. Failure to produce roster of party hunting big game	25.00
Popovich, Carl, R. D. No. 2, Canonsburg. Hunting small game in party of more than five persons	5.00
Robinson, Harry Raymond Jr., 268 Chartiers Drive, Houston. Hunting before 9 A. M. on the opening day of small game	15.00
Sabatasse, James Jr., 64 Dunbar St., Slovan. Failure to show hunting license on demand of officer	20.00
Senking, John, 20 Becker St., Houston. Failure to report shooting accident causing injury to another	25.00
Somogyi, Thomas E., R. D. No. 3, Box 68, McDonald. Hunting small game in a party of more than five persons	5.00
Stahl, Robert C., 649 Wilmington St., Washington. Shooting within 150 yds. of occupied building	25.00
Stephens, Charles E., Monongahela. Hunting without resident license	20.00
Teyssier, William, Cecil. Hunting and disturbing wild birds and animals in safety zone	25.00
Vallet, Andrew, Maple St., Muse. Hunting small game in party of more than 5 persons	5.00
Veatch, David S., 650 Park St., California. Hunting without license	20.00
Webster, Roger, R. D. No. 3, McDonald. Hunting without resident license	20.00
Yuhas, Joseph, Westland. Hunting without resident license	20.00
Zaccarino, Anthony B., Box 183, Cecil. Hunting small game in party of more than 5 persons	5.00
Zaccarino, Felix, Box 183, Cecil. Hunting small game in party of more than 5 persons	5.00
Zaccarino, Joseph, Box 183, Cecil. Hunting small game in party of more than five persons	5.00
Zilich, George, Box 90, Joffre. Hunting small game between 5 P. M. and 7 A. M.	15.00

WAYNE—\$80.00

Bennett, Raymond E., R. D. No. 1, Starrucca. Transporting raw skin of furbearing animal out of State without tag	10.00
Dexheimer, Paul E., R. D., Honesdale. Possessing loaded rifle in vehicle in motion on highway	25.00
Kimble, Robert W., R. D. No. 1, Honesdale. Shooting at unprotected target in big game season	10.00
Putman, Allan E., R. D. No. 1, Honesdale. Shooting at unprotected target in big game season	10.00
Wilcox, Ivan L., Honesdale, R. D. Possessing loaded rifle in vehicle in motion on highway	25.00

WARREN—\$675.00

Cook, Paul L., 221 Jackson St., N. Warren. Shooting at and wounding doe in closed season	100.00
Fitzgerald, Ronald A., 20 N. Marion St., Warren. Attempting to kill black squirrel in closed season	10.00
Groves, Paul E., R. D. No. 1, Sugar Grove. Assisting in killing deer in closed season	100.00

Huckabone, Simon A., R. D. No. 3, Warren. Killing 2 black squirrels over daily limit; killing two squirrels over daily limit	40.00
Knisley, Arthur S., R. D. No. 3, Warren. Hunting without resident license twice	40.00
Martin, Charles L., Box 71, Russell. Killing doe deer in closed season; killing doe deer in closed season	200.00
Myers, Lowell W., R. D. No. 1, Sugar Grove. Possessing parts of deer taken in closed season	100.00
Olander, Joseph F., 1811 Penn Ave., West Warren. Killing one black squirrel in closed season; hunting without resident license	30.00
Rudolph, Edward S., R. D. No. 2, Sheffield. Killing wood duck prior opening hour	15.00
Shirley, Harry E., R. D. No. 1, Clarendon. Shooting within 150 yds. of occupied building	25.00
Slack, Elmer C. Jr., 7 Mill St., Sheffield. Killing mallard duck prior to opening hour	15.00

WESTMORELAND—\$1,490.00

Arb, Samuel E., R. D. No. 1, Murrys ville. Hunting without resident license	20.00
Althardt, William J., Greensburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Anthony, Oscar G., R. D. No. 2, Irwin. Hunting without resident license	20.00
Barclay, John Jr., Barclay-Westmoreland Trust Co., Greensburg. Discharging a shotgun within 150 yds. of occupied building	25.00
Basel, George K., R. D. No. 3, Irwin. Possessing loaded rifle in vehicle standing on highway	10.00
Berry, Harold Edwin, Box 85, Hyde Park. Hunting game without resident license	20.00
Bethune, Orin, R. D. No. 2, Irwin. Hunting without resident license	20.00
Briggs, Claude, R. D. No. 2, Leechburg. Possessing parts of deer taken in closed season	100.00
Cairns, Richard M., R. No. 2, Ligonier. Hunting with firearm not properly accompanied, when under 16 years of age	20.00
Calandrella, Tony, Box 86, Salina. Hunting game in safety zone	25.00
Caruso, Frank E., 227 Briton Ave., Trafford. Failure to produce roster of party hunting big game	25.00
Chambers, J. K., Torrance State Hospital, Torrance. Possessing loaded rifle in vehicle standing on highway	10.00
Davis, Carl B., 321 Market St., Scottdale. Hunting small game between hours of 5 P. M. and 7 A. M.	15.00
Dillon, Walter Z., Gen. Del., Calumet. Hunting without resident license	20.00
Dunbar, James A., R. D. No. 2, New Kensington. Hunting without resident license	20.00
Elliott, Edward V., New Alexandria. Possessing loaded rifle in vehicle standing along highway	10.00
Filtz, Raymond J., R. D. No. 3, Irwin. Disturbing game within safety zone	25.00
Forbes, Frank J., Jr., 105 High St., Mt. Pleasant. Failure to produce roster of party hunting big game	25.00
Forish, Joseph A., R. D. No. 1, Latrobe. Possessing two ringneck pheasants in closed season	25.00
Franzi, Joe, Box 68, Salina. Hunting game in safety zone	25.00
Garlick, Charles M., Box 292, Youngstown. Hunting pheasants between 5 P. M. and 7 A. M.	15.00
Heasley, Dale J., Greensburg. Hunting turkeys with shotgun containing more than 3 shells	25.00
Hollick, Paul G., Box 229, Youngstown. Hunting small game between the hours of 5 P. M. and 7 A. M.	15.00
Hollis, Robert E., 402 Harrison Ave., Greensburg. Possessing loaded rifle in vehicle standing on highway	10.00
Keibler, Richard C., R. D. No. 1, Murrys ville. Hunting squirrel between 5 P. M. and 7 A. M.	15.00
Kendral, Anthony, R. D. No. 1, Jeannette. Discharging a shotgun within 150 yds. of occupied building	25.00
Keslar, Charles Jr., Champion. Failure to tag deer within one hour after killing	10.00
Kistler, Joseph E., R. D. No. 5, Irwin. Hunting without resident license	20.00
Kostrick, William A., Box 146, Harrison City. Possessing one hen pheasant in closed season	25.00
Kroelic, Mike, 119 Westmoreland Ave., Irwin. Discharging a shotgun within 150 yds. of occupied building	25.00
Lament, Emil, R. D. No. 2, Leechburg. Possessing parts of deer in closed season	100.00
Lowe, Clyde H., Scottdale. Failure to post camp roster	25.00
Lucas, Roscoe E., R. D. No. 3, Irwin. Discharging a firearm in safety zone	25.00
Lynn, William H., R. D. No. 2, Belle Vernon. Hunting without resident license	20.00
Martinez, Jesse J., Box 195, Torrance. Possessing pheasant hen	25.00
Morgan, Donald B., R. D. No. 1, Belle Vernon. Hunting rabbits with a pump shotgun containing more than three shells	10.00
Mull, Robert G., Mt. Pleasant. Shooting at unprotected target in big game season	10.00
Myers, Donald S., R. D. 3, Alverton. Hunting without resident license	20.00
Newlin, Herbert E., Scottdale. Failure to post camp roster as required	25.00
Novello, Mario L., Box 127, New Derry. Possessing pheasant hen	25.00
Oliver, John Jr., Box 94, Irwin. Discharging a shotgun within 150 yds. of occupied building	25.00
Owens, Clarence E., Jr., 1105 S. Broadway, Scottdale. Possessing a bear less than one yr. old	200.00
Padjen, George J., R. D. 2, Jeannette. Killing one rabbit in close season	10.00
Padjen, Joseph, 404 Guy St., Jeannette. Possessing one rabbit in close season	10.00
Parenti, Misto A., R. D. 2, Belle Vernon. Possessing 3 rabbits over limit	30.00
Pence, Melvin R., 12 Penn St., Mt. Pleasant. Discharging firearm within safety zone	25.00
Peters, Robert W., R. D. 2, Irwin. Hunting without resident hunting license	20.00
Pluto, Eugene M., 71 Lincoln Ave., Greensburg. Hunting without license	20.00
Ross, Mike A., Jr., 951 W. Pittsburgh St., Greensburg. Hunting without resident hunting license	20.00
Schneider, Joseph W., Box 193, Larimer. Hunting without resident license	20.00
Schuler, Pete, R. D. 2, Leechburg. Possessing parts of deer in close season	100.00

Sistek, Charles, Mt. Pleasant. Possessing loaded rifle in vehicle standing along highway	10.00
Sokol, Frank, 1840 Rebecca St., New Kensington. Killing grouse in close season	25.00
Stoneman, William H., 417 E. Schoonmaker Ave., Monesson. Killing a protected bird	10.00
Werner, Robert E., 34 Anderson St., Latrobe. Hunting rabbits with shotgun containing more than 3 shells	10.00

WYOMING—\$180.00

Akerley, Leslie, R. D. 2, Nicholson. Possessing loaded gun in vehicle not in motion	10.00
Farnham, Roy, G., Box 152, Nicholson. Possessing parts of deer unlawfully taken	100.00
Harvey, James R., R. D. 4, Tunkhannock. Possessing loaded gun in vehicle not in motion	10.00
Newell, Holden A., Jr., R. D. 4, Tunkhannock. Possessing loaded gun in vehicle not in motion	10.00
Phares, Gilbert Joseph, Noxen. Possessing one grouse in close season	25.00
Schoonover, Loren L., Centermoreland. Possessing one grouse taken in close season	25.00

YORK—\$560.00

Anderson, Ervin, R. D. 3, Dover. Hunting rabbits with shotgun containing more than three shells	10.00
Brady, Eugene A., 311 York St., Gettysburg. Possessing loaded rifle in vehicle standing along highway	10.00
Cuculano, Philip J., 259 E. King St., York. Hunting without resident license	20.00
Downs, Richard E., 240 W. Market St., York. Hunting without resident license	20.00
Ewell, Irvin V., R. D. 1, Woodbine. Hunting without resident license	20.00
Forry, Harry N., R. D. 2, Dover. Hunting rabbits with shotgun containing more than 3 shells	10.00
Fortney, David K., 603 N. George St., York. Hunting without resident license	20.00
Garrety, Thomas A., 587 W. College Ave., York. Lending license to another	20.00
Griffin, Clarence T., 153 S. Newberry St., York. Possessing loaded rifle in vehicle in motion on highway	25.00
Hengst, Curvin E., R. D. No. 8, York. Hunting rabbits with shotgun containing more than 3 shells	10.00
Hershey, Kurvin P., 1918 S. Queen St., York. Possessing loaded rifle in vehicle in motion on highway	25.00
Jay, Wendall L., Y.M.C.A., York. Hunting game prior to opening hour first day	15.00
Jones, Charles K., Etters. Killing doe deer by mistake	25.00
Kling, Samuel C., 130 S. Duke St., York. Possessing loaded shotgun in vehicle standing along highway	10.00
Krebs, Titus Snyder, 121 Baltimore St., Hanover. Hunting without license	20.00
Lawrence, Raymond J., R. D. No. 4, Hanover. Hunting squirrels between 5 P.M. and 7 A.M.	15.00
Linebaugh, Edward W., R. D. No. 2, Dover. Hunting rabbits with shotgun containing more than 3 shells	10.00
Mundis, Russell C., Hellem. Possessing loaded rifle in vehicle in motion on highway	25.00
Myers, Charles E., 339 E. Princess St., York. Hunting without license	20.00
Ness, Paul Richard, 377 Maryland Ave., York. Possessing loaded shotgun in vehicle in motion on highway	25.00
Newcomer, John M., R. D. No. 3, Glen Rock. Hunting without resident license	20.00
Noel, John H., 503 E. Middle St., Hanover. Hunting in safety zone	25.00
Plunkett, Rudolph Carol, 261 W. Jackson St., York. Hunting ducks after closing hour	15.00
Shultz, David S., 154 Main St., Spring Grove. Killing ringneck hen	25.00
Simmons, Charles A., 217 W. King St., York. Hunting without license	25.00
Sinclair, Emory E., High Rock. Failure to tag deer within one hour after killing	10.00
Speicher, Alvin W., R. D. No. 5, York. Possessing loaded rifle in vehicle in motion on highway	25.00
Thompson, Everett H., R. D. No. 1, Fawn Grove. Hunting rabbits with shotgun containing more than 3 shells	10.00
Wilson, Thomas A., R. D. No. 1, Woodbine. Hunting rabbit with shotgun containing more than 3 shells	10.00
Woodward, Wilton, 131½ Railroad St., Hanover. Hunting without license	20.00
Yound Jr., Harry H., R. D. No. 2, New Freedom. Hunting without resident license	20.00

NON-RESIDENT—\$9,545.00

Alexander, William S., Conowingo, Md. Hunting without non-resident license	50.00
Allen, Roscoe, Jr., Indianapolis, Ind. Shooting at random during big game season	10.00
Alphin, James L., Jr., Newport, Del. Attempting to remove game out of state without non-resident license	10.00
Anderson, Wesley H., Paulsboro, N. J. Making false statement to secure hunting license; hunting without non-resident license; attempting to transport two rabbits and one squirrel out of state without proper license	100.00
Andracki, Henry A., Brooklyn, N. Y. Hunting one day without non-resident license	50.00
Athony, Marion W., New Castle, Del. Hunting without non-resident license	50.00
Antonszak, Edmund, Newark, N. J. Hunting without non-resident license	50.00
Anzelmo, Robert P., Youngstown, Ohio. Assisting in transporting unlawfully killed deer	100.00
Armentrout, George F., Washington, D. C. Securing a license by using address other than legal place of residence	20.00
Barnhouse, Carl W., Jr., Springfield, Ill. Hunting without non-resident license	50.00
Bays, John M., Brooklyn, N. Y. Possessing grouse killed in closed season	25.00
Beery, Stanley B., Richwood, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Bernard, George, Portland, Ohio. Possessing spike buck taken in closed season	100.00
Benman, Benton, Jr., La Rue, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00

Blair, J. Charles, Attica, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00	Hastwell, Richard, Stuebenville, Ohio. Hunting without non-resident license	50.00
Bosley, Abram W., Baltimore, Md. Hunting without non-resident license	50.00	Hastwell, Wilfred, Stuebenville, Ohio. Hunting without non-resident license	50.00
Bosley, Vernon L., Cockeysville, Md. Hunting without non-resident license	50.00	Haviland, Joseph, Rushville, N. Y. Possessing loaded shotgun in vehicle in motion on highway	25.00
Brosberger, Anthony J., Camden, N. J. Hunting without non-resident license	50.00	Hayes, Gail, Hundred, W. Va. Transporting game out of state	10.00
Brennan, Albert G., Port Jervis, N. Y. Hunting small game in party of more than 5 persons	5.00	Heidrick, Cletus W., Elyria, Ohio. Failure to maintain proper roster of party hunting big game; possessing parts of illegally killed deer	125.00
Briney, Edward E., Bellevue, Ohio. Hunting deer with automatic rifle	100.00	Hennen, Harley M., Burton, W. Va. Transporting game out of state	25.00
Brubaker, Earl W., Essex, Md. Hunting without non-resident license	50.00	Hensel, Arthur C., Strafford, Conn. Hunting two days without nonresident license	100.00
Brumbaugh, Thomas H., State Line, Md. Hunting without non-resident license	50.00	Hillier, Frederick G., Brookville, N. Y. Hunting without non-resident license	50.00
Bukovec, Joseph, Gauga Lake, Ohio. Transporting small game unaccompanied by owner	10.00	Holloway, Milford C., Freeland, Md. Allowing dog to enter State Game Propagation Area	25.00
Burkosky, Edward J., Brooklyn, N. Y. Unlawfully transporting one rabbit out of state	10.00	Holzeimer, Anthony L., Rosedale, N. Y. Possessing loaded rifle in vehicle in motion on highway	25.00
Carter, Frank S., Bridgeville, Del. Hunting without non-resident license; making false statement to secure hunting license	70.00	Horst, Preston G., Hyattsville, Md. Possessing pheasant hen	25.00
Chell, Aldo A., Brooklyn, N. Y. Transporting small game not properly marked	30.00	Houston, Lawrence O., Fairlawn, N. Y. Hunting one day without nonresident license; giving false information to obtain license	70.00
Chuey, John J., Lorvellville, Ohio. Possessing skin of muskrat unlawfully killed	50.00	Johnson, Wilbur H., Claymont, Del. Hunting without nonresident license	50.00
Clemets, Tollie E., Curdington, Ohio. Transporting untagged deer	25.00	Kaldes, George P., Washington, D. C. Hunting without non-resident license	50.00
Cobb, Clarence A., Hudson, Ohio. Transporting untagged deer	25.00	Kanar, Lawrence A., Wyandotte, Mich. Hunting without non-resident license	50.00
Cole, Charles E., Pikesville, Md. Hunting prior to opening hour first day	15.00	Karbautism, Kei H., Bayonne, N. J. Hunting without nonresident license	50.00
Collins, Edward, Newark, N. J. Hunting without non-resident license	50.00	Kerr, Tom P., Detroit, Mich. Hunting without nonresident license	50.00
Collister, Ward D., Rochester, N. Y. Failure to maintain roster of party hunting big game; possessing parts of a deer unlawfully taken	125.00	Keselowsky, George, Middleburg, N. Y. Transporting game out of state	30.00
Cooper, Calvin M., Glen Aubrey, N. Y. Hunting without non-resident license; making false statement to secure hunting license	70.00	Kierolichm, Joseph O., Cortland, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Cornell, Patrick G., Binghamton, N. Y. Transporting small game in container not properly marked	20.00	Kovacs, Ernest K., Fords, N. J. Shooting at random in big game season	10.00
Criddle, Sidney R., Deposit, N. Y. Possessing parts of deer unlawfully taken	100.00	Laezza, Ralph, Brooklyn, N. Y. Hunting without nonresident license	50.00
Crockett, David C., Takoma Park, Md. Hunting without nonresident license; making false statement to secure hunting license	70.00	Layton, Richard C., Wilmington, Del. Possessing loaded rifle in vehicle in motion on highway	25.00
Davis, David T., Binghamton, N. Y. Transporting unlawfully game animal out of state	10.00	Lazarowicz, John F., Bayonne, N. J. Attempting to transport two rabbits out of state; attempting to transport game bird out of state	45.00
Daubert, Clarence J., Jr., Belvidere, N. J. Hunting without a non-resident license	50.00	Leslie, Paul W., Cleveland, Ohio. Hunting prior to opening hour first day	15.00
DeMarco, Louis L., Newark, N. J. Hunting game in Safety Zone	25.00	Lilly, Michael, Jr., Charleston, W. Va. Possessing loaded rifle in vehicle in motion on highway	25.00
Dinger, Robert S., Washington, D. C. Securing a license using address other than his legal place of residence	20.00	Lucas, Peter P., Harrison, N. J. Unlawfully transporting game animal out of state	10.00
Dinger, Vernon O., Washington, D. C. Securing hunting licenses for others not entitled to same	20.00	Mace, Maudesville, Akron, Ohio. Transporting untagged game animal	25.00
Drimones, Henry, Camden, N. J. Hunting without nonresident license	50.00	McCollim, Bert W., Canton, Ohio. Hunting without nonresident license	50.00
Doverspike, Kenneth, Youngston, Ohio. Hunting without non-resident license	50.00	McCombie, Leonard L., Lafayette, La. Attempting to kill a deer by use of an artificial light	100.00
Dudgeon, Frank C., Cleveland, Ohio. Hunting without nonresident license	50.00	McDonald, Perry M., Ceres, N. Y. Possessing one male deer and parts of another deer taken in closed season	200.00
Durig, Joseph H., Vienna, Ohio. Killing a grouse in closed season	25.00	McKee, Robert L., Baltimore, Md. Hunting without nonresident license	50.00
Elmer, George K., Atlantic City, N. J. Hunting without nonresident license	50.00	Macomber, Wallace F., Deposit, N. Y. Possessing parts of deer taken in closed season	100.00
Emerson, Richard U., Havre De Grace, Md. Hunting without non-resident license	50.00	Maerz, Russell U., Richmond Hill, N. Y. Making false statement to secure license	20.00
Emmons, Charles T., Rochester, N. Y. Hunting without nonresident license	50.00	Martnishn, John E., New York, N. Y. Hunting without non-resident license	50.00
Erat, Adolph E., Endicott, N. Y. Hunting without nonresident license	50.00	Masengill, Chester C., Detroit, Mich. Hunting without non-resident license	50.00
Eskey, Roland E., Jr., Greenville, N. Y. Hunting without non-resident license	50.00	Mekeel, John S., Essex, N. J. Possessing loaded rifle in vehicle in motion on highway	25.00
Estabrook, Ralph F., Binghamton, N. Y. Making false statement to secure a hunting license; hunting without nonresident license	70.00	Melito, John P., Devon, Conn. Attempting to transport one rabbit out of state	10.00
Evans, John F., Newark, N. J. Making false statement to secure hunting license; hunting without nonresident license	70.00	Michaels, Thomas A., Cleveland, Ohio. Hunting without non-resident license	50.00
Fairbanks, Ronald J., Montor, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00	Mistacti, Eld A., Tontogany, Ohio. Killing male deer not having two points to one antler	100.00
Fell, George H., Buffalo, N. Y. Transporting untagged deer	25.00	Mohler, Herbert S., Baltimore, Md. Hunting without nonresident license; on two days	100.00
Fiddler, Willard J., Mineral Route, Ohio. Transporting untagged deer	25.00	Monaco, Peter P., Union, N. Y. Possessing pheasant hen	25.00
Fiechter, Arthur M., Brooklyn, N. Y. Hunting without non-resident license	50.00	Morra, Nick, Weirton, W. Va. Possessing one wood duck over season limit	10.00
Finnelrock, Thomas, Jr., Oakfield, N. Y. Killing deer in closed season; possessing loaded rifle in vehicle in motion on highway	125.00	Moseson, Merland L., Cleveland, Ohio. Hunting wild ducks prior to opening hour	15.00
Fisher, Raymond F., Wharton, N. J. Hunting without nonresident license	50.00	Mossina, Luis A., Cleveland, Ohio. Killing a deer in closed season	100.00
Fox, Richard E., Niles, Ohio. Hunting without nonresident license	50.00	Mueller, Francis X., Baltimore, Md. Hunting without non-resident license	50.00
Fox, Jack D., Prospect, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00	Noll, Lawrence F., Clifton, N. J. Failure to tag five traps; trapping without nonresident trappers license	100.00
Frederick, Anthony J., Clarksburg, W. Va. Hunting without non-resident license	50.00	O'Brien, James F., Clayton, N. Y. Hunting deer with automatic firearm	100.00
Frederick, Eugene M., Clarksburg, W. Va. Hunting without non-resident license	50.00	Offut, Clarence C., Poolesville, Md. Possessing loaded rifle in vehicle in motion on highway	25.00
Frey, Lawrence F., Wilmington, Del. Possessing a hen pheasant	25.00	Omaggio, Domenico, Newark, N. J. Hunting within 150 yds. of occupied building	25.00
Geist, Clarence E., Detroit, Mich. Transporting untagged deer	25.00	Outlaw, Thomas J., Bridgeport, Conn. Unlawfully transporting game animals out of state; hunting two days without non-resident license	150.00
Geordano, John, Jamestown, N. Y. Hunting without nonresident license	50.00	Owrr, Roy L., Cononingo, Md. Failure to maintain proper roster; shooting at an unprotected target in big game season	35.00
Gillett, Chester L., Attica, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00	Parsons, Howard E., Sharpsburg, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Gilmore, William H., Chicago, Ill. Hunting game on Sunday	25.00	Peachey, John H., Brentwood, Md. Transporting pheasant hen	25.00
Gonscak, Pete P., Royal Oak, Michigan. Hunting without non-resident license	50.00	Peterson, Duane R., Clear Spring, Md. Hunting without non-resident license	50.00
Goodrich, Hunter, Englewood, N. J. Hunting without nonresident license; giving false information to obtain license	70.00	Petraccaro, Rocco, Keansburg, N. J. Failure to stop motor vehicle upon signal of game protector	10.00
Gould, Harold C., Pomona, N. J. Hunting without nonresident license; attempting to transport 2 rabbits out of state	70.00	Piazza, Charles A., Jamestown, Ohio. Hunting without non-resident license	50.00
Gregg, Rex, Woodruff, W. Va. Transporting pheasant out of state	25.00	Picking, Melvin C., Media, N. Y. Hunting without nonresident license	50.00
Gunshore, Carl L., Elizabeth, N. J. Hunting without nonresident license	50.00	Pierstorff, Gerald L., Celina, Ohio. Failure to maintain complete roster of party hunting big game	25.00
Haag, John F., Akron, Ohio. Hunting without nonresident license	50.00		
Haduck, William M., Endicott, N. Y. Transporting game animal out of state	10.00		
Hall, Wade O., Wilmington, Del. Possessing loaded shotgun in vehicle standing on highway	10.00		
Hammrich, John C., Brooklyn, N. Y. Securing hunting license while hunting rights have been denied	40.00		
Hardesty, Joseph L., Washington, D. C. Hunting without non-resident license	50.00		
Hastwell, Frederick, Stuebenville, Ohio. Hunting without non-resident license	50.00		

Pittinson, George W., Masillon, Ohio. Transporting parts of big game untagged	25.00
Pittman, Donald L., Sandusky, Ohio. Hunting rabbits with shotgun containing more than 3 shells	10.00
Polinsky, John, Dearborn, Mich. Hunting without nonresident license	50.00
Przeslica, Boly J., Lakewood, Ohio. Failure to post camp roster as required	25.00
Raber, Paul R., Blacksville, W. Va. Possessing one squirrel over daily bag limit	10.00
Reed, Erwin W., Ripley, N. Y. Possessing loaded rifle in vehicle standing on highway	10.00
Rice, Willard, Brandonville, W. Va. Possessing deer taken in closed season	100.00
Romans, Earl P., Silver Creek, N. Y. Possessing loaded rifle in vehicle standing on highway	10.00
Ross, Dr. Milton R., New York, N. Y. Hunting without nonresident license	50.00
Ruhl, Herman, Omaha, Nebraska. Hunting without nonresident license	50.00
Rust, Freeman D., Painsville, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Rust, Wayland F., Painsville, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Sacatch, Frank J., Menter-on-the-Lake, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Sator, Joseph R., East Williston, N. Y. Giving false information to obtain resident hunting license	20.00
Schoonover, Reese, Vestel, N. Y. Hunting without nonresident license	50.00
Sells, Charles D., Trenton, N. J. Possessing loaded rifle in vehicle standing on highway	10.00
Sharek, Carl R., Washington, D. C. Hunting without nonresident license	50.00
Shard, Michael F., Newark, N. J. Hunting without nonresident license	50.00
Sheldon, Loyal E., Jamestown, N. Y. Hunting without nonresident license	50.00
Shepherd, Richard A., Dover, N. J. Hunting without nonresident license; transporting portions of two rabbits out of state	70.00
Shingledecker, Laird D., Monroe, Mich. Hunting without nonresident license	50.00
Shotwell, George C., Belvidere, N. J. Using artificial light to take a deer; assisting in the killing of deer with automatic rifle; assisting in the killing of deer in closed season	300.00
Shuman, Howard I., Hagerstown, Md. Giving false information to obtain resident hunting license	20.00
Sibilia, Virginius L., Newark, N. J. Hunting in Safety Zone	25.00
Smith, Charles F., Jericho, South Carolina. Hunting without nonresident license	50.00
Souder, Frank W., Jr., Audubon, N. J. Using automatic shotgun to hunt game	10.00
Standen, Harry B., Bergenfield, N. J. Transporting parts of game animal during closed season	100.00
Stepko, Michael, Cleveland, Ohio. Transporting small game unaccompanied by owner	10.00
Streitenberger, Edward B., Springfield, Ohio. Transporting untagged deer	25.00
Stettner, Carl, New York, N. Y. Attempting to remove game animal out of state	10.00
Study, Clair W., Westminster, Md. Possessing loaded rifle in vehicle standing on highway	25.00

Sullivan, William E., Springfield, Mass. Failure to maintain proper roster of party hunting big game; possessing parts of an illegally killed deer	125.00
Supko, Paul, Strafford, Conn. Hunting without nonresident license; attempting to transport game animals out of state	70.00
Szabo, William, Warren, Ohio. Hunting without nonresident license	50.00
Tantum, Russell S., Trenton, N. J. Possessing loaded rifle in vehicle standing on highway	10.00
Taylor, John H., Wellsville, Ohio. Hunting without nonresident license	50.00
Trachsel, William, Dover, Ohio. Buying a deer in Pennsylvania	100.00
Trout, Daniel F., Jr., Arlington, Va. Making false statement to secure license	20.00
Tucker, Frank L., Binghamton, N. Y. Transporting game animal out of state	10.00
Urban, John R., Youngstown, Ohio. Transporting untagged venison	25.00
Venturini, Frank, Boonton, N. J. Possessing one grouse taken in closed season	25.00
Vinson, Wayne H., Torrence, California. Hunting without nonresident license	50.00
Vogt, John, Eldred, N. Y. Failure to stop vehicle upon signal of Game Protector	10.00
Vose, William S., Baltimore, Md. Hunting without nonresident license	50.00
Warner, Ralph L., Findlay, Ohio. Hunting without nonresident license	50.00
Whaley, Clarence F., Laurel, Del. Possessing 2 pheasants and 10 rabbits unlawfully taken; hunting without nonresident license	200.00
Whaley, Thomas H., Laurel, Del. Possessing 2 pheasants and 10 rabbits unlawfully taken; hunting without nonresident license	200.00
Wherry, Robert L., Wilmington, Del. Hunting without nonresident license	50.00
White, Charles W., Clarksburg, W. Va. Hunting without nonresident license	50.00
White, Hollis A., Rochester, N. Y. Failure to maintain proper roster of party hunting big game; possessing parts of illegally killed deer	125.00
Williams, Alfred A., Rochester, N. Y. Hunting without nonresident license	50.00
Williams, Durward L., Parkersburg, Va. Hunting without nonresident license	50.00
Willis, Derle E., Vermilion, Ohio. Possessing loaded shotgun in vehicle standing on highway	10.00
Willis, Jack E., Canton, Ohio. Transporting untagged deer	25.00
Wynn, Edward H., Newell, W. Va. Attempting to kill deer in closed season	100.00
Wynn, Say, Columbus, Ohio. Attempting to kill deer in closed season	100.00
Yaconovich, Stanley J., Garfield, N. J. Hunting four days without nonresident license	200.00
Yost, William F., Camden, N. J. Making false statement to secure a license; hunting without nonresident license	70.00
Youket, Fred, Binghamton, N. Y. Hunting without nonresident license	50.00
Zimmerman, Samuel L., Hancock, Md. Failure to stop motor vehicle upon signal of Game Protector	10.00

IT SHOULDN'T HAPPEN AGAIN—from Page 16

down and it went off when it hit the ground. Missed his leg by a whisper. There may be some small excuse for this. I've long believed that our safety programs put too much stress on putting the gun on safe. It lulls too many into a false sense of security. The truth of the matter is that any gun is a deadly weapon from the time you put the shells in until you take them out. Furthermore, you are responsible for your gun, safety on or off, until you take the shells out. The greatest safety device ever made is the careful man. There are only a few guns whose safeties are really safe. These are mostly military arms and sporters modeled along those lines. The rest usually lock the sear or block the trigger. The margin of safety is far too small for any sane man to trust them. I have an example in my gun cabinet. A famous make and little used, last year it started firing on safe position. I always test the safety on starting out; then never trust it. The best rule I ever found is as follows: If circumstances will not permit you to control the muzzle of your gun, take the shells out.

Now, let's take up another important factor that figures in a lot of our hits and misses. A good shooting coat is a joy to its possessor. The old canvas coat of our forefathers is as obsolete as the feather duster. Throw a gun to your shoulder and your cheek is about two inches away from the stock. You give that last desperate heave to get down on the stock and the bind of the sleeves pulls the whole affair up between your ears. If you have some game in the back, it makes a nice sag in the coat for the neighbors to view but it's an abomination in the field. Long ago I went to the sleeveless hunting coat for small game. But I have yet to see a wool coat for cold weather that was designed for shooting comforts as well as warmth. I believe one will appear shortly because sporting clothes are receiving a lot more attention from the manufacturers and by next year we should see some really good hunting togs.

Now, since I've learned some of these things the hard way, let me again quote, "Be warned by my lot, which I know you will not, and paste this in your gun cabinet and read it before you start NEXT season."

A POINTING LESSON—from Page 16

There are still many trainers who prefer to perfect the young dog in yard breaking before teaching to point game. For a wide fast individual that may not possess too much pointing instinct yard training may turn out to be a great advantage. If your prospect falls into this classification take a pan of food and a check cord to a place without distractions. Place the food some distance from the dog, attach the cord to his collar and when he starts for the food, allow him to reach within a few feet of it, stop him with the cord, and at the same moment firmly speak the command "whoa." Repeat this lesson several times at each lesson. Make him stand steady several minutes each time, and continue it until he stands on his own. When the lesson is over let him have the food. He will associate it as a reward for obeying a wise and gentle master. When you have perfected him in this lesson it will be a simple matter to stop him with the same command, "Whoa" when he approaches game in the field. Once he points and holds long enough for you to reach him you have the opportunity to show him that pointing is not just a pause, but a staunch position to be held as long as the game remains.

Just pointing is not enough, train him to hold dependably so that no matter how long it takes you to find him he will be there with his game. Teach him to point positively and with bold decision, displaying the manner and style of a dog worthy to be your hunting companion.

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Read The Pennsylvania "Game News"!

The Story Behind the Cover



Using every trick of the trapping trade—and some of their own as well—Pennsylvania's Game Protectors have been for decades outsmarting the wily red fox on the trapline. Unlike commercial trappers or sport-seeking country boys, however, the main reason that these men make and inspect their "sets" is predator control. And contrary to some public opinion, this control is not exercised with the aim of exterminating "ole Reynard." It is used as a tool of wildlife management to insure better hunting and wildlife conditions. For that reason Commission employes trap to control an over-abundance of foxes and other predators in areas within their districts.

Here veteran Game Protector Ed Richards, Portland Mills, who is in charge of District E-10, displays the results of one day's tour of his trapline last February.

Working under instructions of the Commission, he and fellow workers throughout Pennsylvania's 150 districts are making every effort to strengthen and improve predator control in every way possible. In addition to running their own trap-lines, these Game Protectors give advice and instruction to novice trappers on trapping methods, rules and regulations. When circumstances permit, they also comply with specific requests from farmers or urban residents to remove harmful or destructive foxes, raccoons, skunks, or other predacious animals and birds.

The Game Commission, through its public servants like Game Protector Richards, stands ready to serve the best interests of the hunter, trapper, and landowner in controlling and managing the fox and his wild kin, making every effort to produce a maximum wildlife crop each year.

PENNSYLVANIA Game News

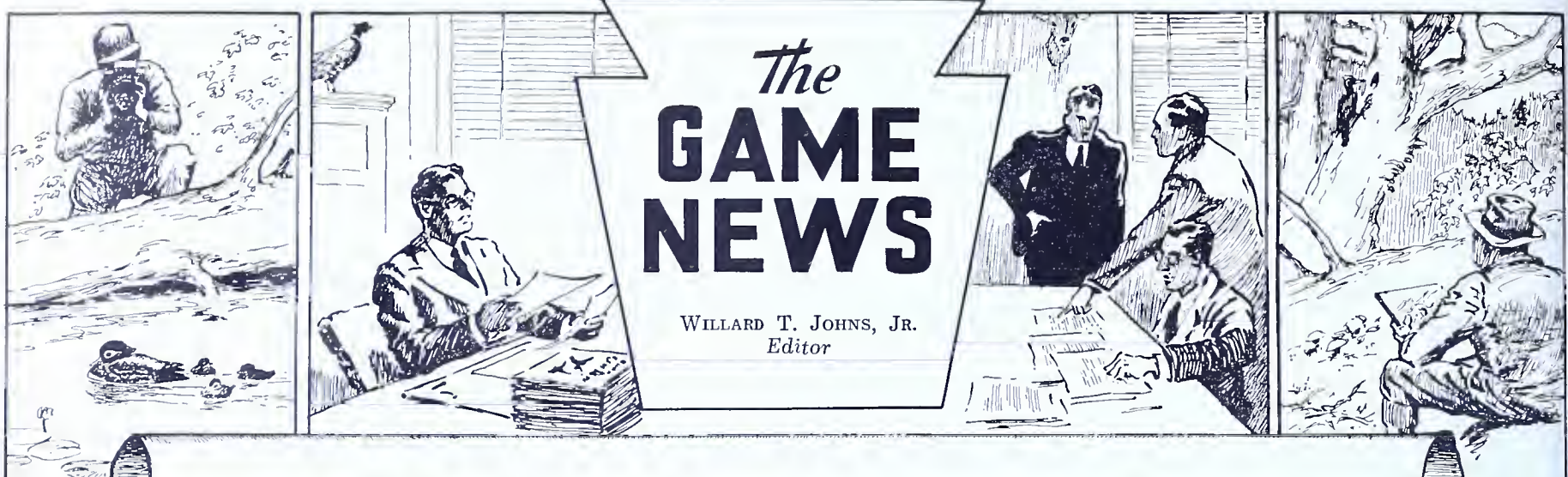
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The GAME NEWS

WILLARD T. JOHNS, JR.
Editor

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COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR

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Spring—Time For Conservation

Spring, with all its budding beauty and despite its promise of abundance, poses serious problems for Pennsylvania wildlife. Perhaps no time of year is more critical to the future of the birds and animals of our fields and forests. The start of a new cycle in nature's eternal fight for survival finds wildlife in the void between the cold hardships of winter and the warm growth of summer—in a period of scarcity. What happens to our wildlife in the next few months will determine the success of a hunting season half a year away.

Now, more than at any other time of the year, each rabbit, each pheasant, each grouse, and each deer is worth many times its weight in conservation gold. For each wild creature in spring possesses and is ready to use the tremendous power of reproducing and increasing its kind. The line between extinction and abundance is now drawn to its finest point. Along that line, the muffled drumming of the grouse, the throaty crow of the cock pheasant, the thrilling spiral of a woodcock's courtship flight all herald more enjoyment, finer recreation, and better sport.

Unfortunately for the wildlife, spring is also a time of increased human activity in Pennsylvania's out-of-doors. The first warm days of the new season will bring thousands of cars to the highways, places where wildlife is apt to be congregated, feeding on tender shoots of green pushing through the berm. Fishermen and picnickers follow the call of spring's re-awakening into our wooded ravines and hillsides in search of sport and pleasure. In their paths they may accidentally—but excitedly—stumble on the nests of birds like the grouse and wild turkey—nests that hold the future of the species. Spring also brings increased activity on the farms, and the warm, dry days mislead persons into burning field and brushland—killing nesting pheasants and rabbits as well as robbing the soil of its natural fertility.

Thus, at a time of year when all of nature's power is being devoted to bearing a new generation of wild birds and animals, man's activities are key factors in conservation's future.

If we want more wildlife, or finer sport in the fall, we should drive more carefully along the highways in spring, walk carefully and quietly through the woods, and exercise a little additional conservation sense on the farm-lands. When you in any way kill a rabbit or a pheasant in spring, it may mean the loss of a dozen or more pieces of game that might have been. The thoughtless molesting of a wild turkey nest doesn't just frighten away one hen—it may prevent the hatching of a dozen or more chicks which become the turkeys of the future. The burning of one farm field or brushland does not just kill a few pheasants or rabbits—it prevents the game birds and animals from reproducing their young and providing a crop of wildlife.

GIVE WILDLIFE THE CHANCE TO RAISE YOUR HOPES—AND THEIR YOUNG!

Big Bertha

by Leo A. Luttringer Jr.



BERTHA—we called her *Big Bertha* because of her size—raised her head toward the late afternoon sky, sniffed a few times, and continued searching in the snow for beechnuts under a favorite stand.

Very soon she must start looking for a comfortable place in which to pass her long winter's sleep. Her body was fat enough to sustain her until spring, so she was not worrying about food problems; rather she anticipated the coming of the little cubs and wanted to select the snuggest possible home for them—one in which they would be cozy and warm despite the bitter cold days of late January or early February, when they would first see the light.

As Bertha continued to feed beneath the beechnut stand her restlessness grew; and long ere her companions left the favorite rendezvous she had ambled off through the woods in quest of a winter haven. As she moved here and there the light snow was conspicuously marked by her large foot-prints.

A lone game protector, who for days had counted the bear tracks to and from the beechnut stand, figured that one of them had gone to rest for the winter. He smiled whimsically for he had visions of finding Bertha's retreat. Little did he realize that his wish would be granted under the most unusual circumstances. The next morning a great blizzard wiped out all traces of her wanderings.

Plodding steadfastly into the howling wind and biting snow, Bertha realized that she must find shelter before very long, else the ever-deepening drifts would make it impossible to locate a satisfactory retreat.

Turning off an old trail she buffeted her way through a maze of small saplings for about a quarter of a mile then, in the center of a small clearing, she noticed a large log. It was already piled high with snow along one side and atop its wide girth, leaving a sheltered nook on the lee side. It looked inviting and Bertha wasted no time making it comfortable. She fashioned a shallow depression in the leaves close to the log, took a last look at the world around her, curled up and went to sleep.

Day after day for many weeks the lone game protector wended his way through the snow covered woodlands, placing food here and there for the game, trapping for foxes and other predators, but always keeping on the lookout for likely places where a bear might hibernate. But he always returned home at night disappointed.

In the leafy depression, now much deeper and wider because of Bertha's subconscious movements, four naked and wobbly-looking cubs were born during a day in late January. In beardom this was remarkable. Usually only two cubs are born, sometimes three, but four?—almost never!

The youngsters were nearly eight inches long and weighed about twelve ounces. They were blind and nearly naked, and struggled weakly about their mother seeking warmth and nourishment. Bertha nursed them tenderly, even in her half stupor, and thus the little family lived, unaware that fate was about to play one of her many tricks upon them.

At the end of a month the cubs opened their eyes and beheld the world around them for the first time. Could we but imagine their thoughts as they looked upon their mother and crawled about inside the nest. And what did they think of their woodland surroundings or the patch of blue sky which formed its covering? Bertha had not lost much of her plumpness and her glossy coat shown beautifully as the sun cast shimmering rays through its rippling surface when she moved.

The cubs were ignorant of all activity save their own scramblings inside the nest. They did not see a large, blue-gray Goshawk swoop upon an unsuspecting grouse just a few feet from their home. Neither did they see a bloodthirsty weasel streak by on the trail of a snowshoe rabbit, nor a large porcupine nonchalantly peeling the bark from a nearby sapling. A slate-colored junco frightened them momentarily as it alighted on the snow-covered edge of the log—but only for a moment.

And so life continued inside and outside the little sanctuary until one day the cubs received the scare of their young lives, and even Bertha showed some signs of alarm.

Intimate glimpses of the family life of a large black bear and her four cubs

A school teacher in a northern Pennsylvania town and his two beagle hounds, out for an afternoon's tramp through the forest, almost walked onto Bertha and her family in early March. Neither he nor the dogs waited to become better acquainted, although it is doubtful whether Bertha would have resented their intrusion at the moment. She was as badly frightened as they were.

From that moment Bertha and her little quartet became famous wilderness characters. When news of her reached me via Bill Overturf the local game protector and his supervisor, Hayes T. Englert, Dagwood's try for the morning bus looked like slow motion compared with the time it took me to reach the big woods. Eight hours and 220 miles later we were making our way silently through the deep snow to view a woodland wonder and to pay homage to the 300 pound creature (Bertha weighed all of that) that made it possible.

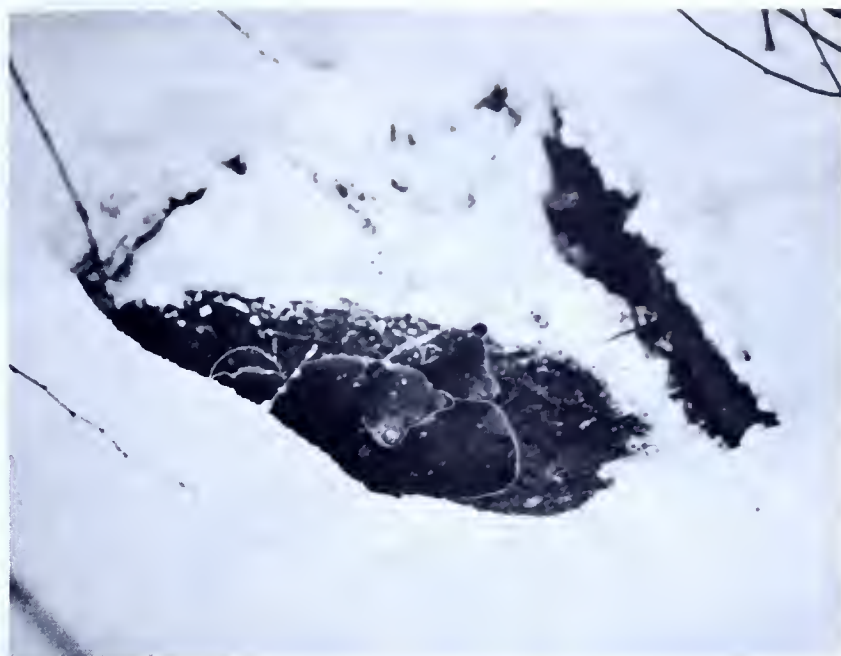
After about a mile and a half trek through a beautiful forest of snow-laden hemlocks and white-cloaked streambanks the game protector held up a warning finger. Within a few paces he halted, bent over and pointed through the brush. About a hundred feet away I saw what appeared to be a black stump. Upon closer scrutiny the "stump" moved. When it did my spine tingled because it wasn't a stump—it was Bertha's enormous head peering over the side of her snow-bound retreat.

As we watched she grew uneasy. All of a sudden she clambered out of the nest and vanished into the forest. We were dumb stricken. We thought we had frightened her and that she would desert her babies. I had that happen once before while I was photographing a mother and three cubs, and was left with a trio of orphans on my hands.

Much to our elation she reappeared after about five minutes. She looked in our direction for a few seconds, then stepped into the nest and began licking the youngsters with her tongue. Every now and then she would yawn prodigiously. We took some still and motion pictures with telephoto lens but the distance was a little too great and there was too much brush in the way to give us a proper image.

We observed her for about half an hour during which she moved from the nest three more times and stood close by, sniffing and peering uneasily toward us. Not wanting to disturb her further we left.

Next day when we returned Bertha slunk away at our approach. We moved in as noiselessly as possible, not talking above a whisper, and took several closeups of the four whimpering youngsters. Then as silently and as cautiously we retreated about seventy-five feet and waited. In a few moments she returned, visibly alarmed and quivering all over. She soon subsided, however, then entered the depression and began nosing the cubs affectionately. We started homeward soon afterwards.



In the leafy depression, four cubs were born one day in late January.

The following day we approached within fifty feet before she left the nest. Again we moved in to take closeups. It was blowing a real blizzard and the snow was as soft and light to the tread as a Persian rug. That almost proved our undoing. We had barely started taking pictures when Bill, the protector, complained, for the first time aloud, that he couldn't see all of the cubs through the finder. As I raised my head to offer some advice I saw Bertha bearing down on us like an avalanche. She was about a hundred feet away and coming like a whirlwind. I yelled "Bill, here she comes!" and we wheeled and ran. When we looked over our shoulders fifty feet later she had just come to a shuddering stop at the edge of the nest, tense and quivering like a plane straining at the chocks.

We stood motionless and after a while she relaxed, entered the nest and curled around the crying foursome. She paid us no heed from then on and we resumed our shutter clicking. But there was still too much brush in the way to suit me so I started maneuvering closer. At about the thirty-five foot mark my right foot sank into a bottomless snowdrift and spilled me on that side up to the armpit. The noise aroused Bertha, who was nursing the cubs, and she stepped out of the nest and stood looking at me. Bill had one eye on her and the other on me, and from the look in them I think he was laughing all over inside. I wasn't. I waited several minutes then gradually got to my feet, side-stepped a little to the left, and made my last three exposures fairly in the open. As I snapped the last picture I thoughtlessly turned toward Bill too quickly. Bertha caught the sudden movement and started towards us. We beat a hasty retreat and did not stop until we were

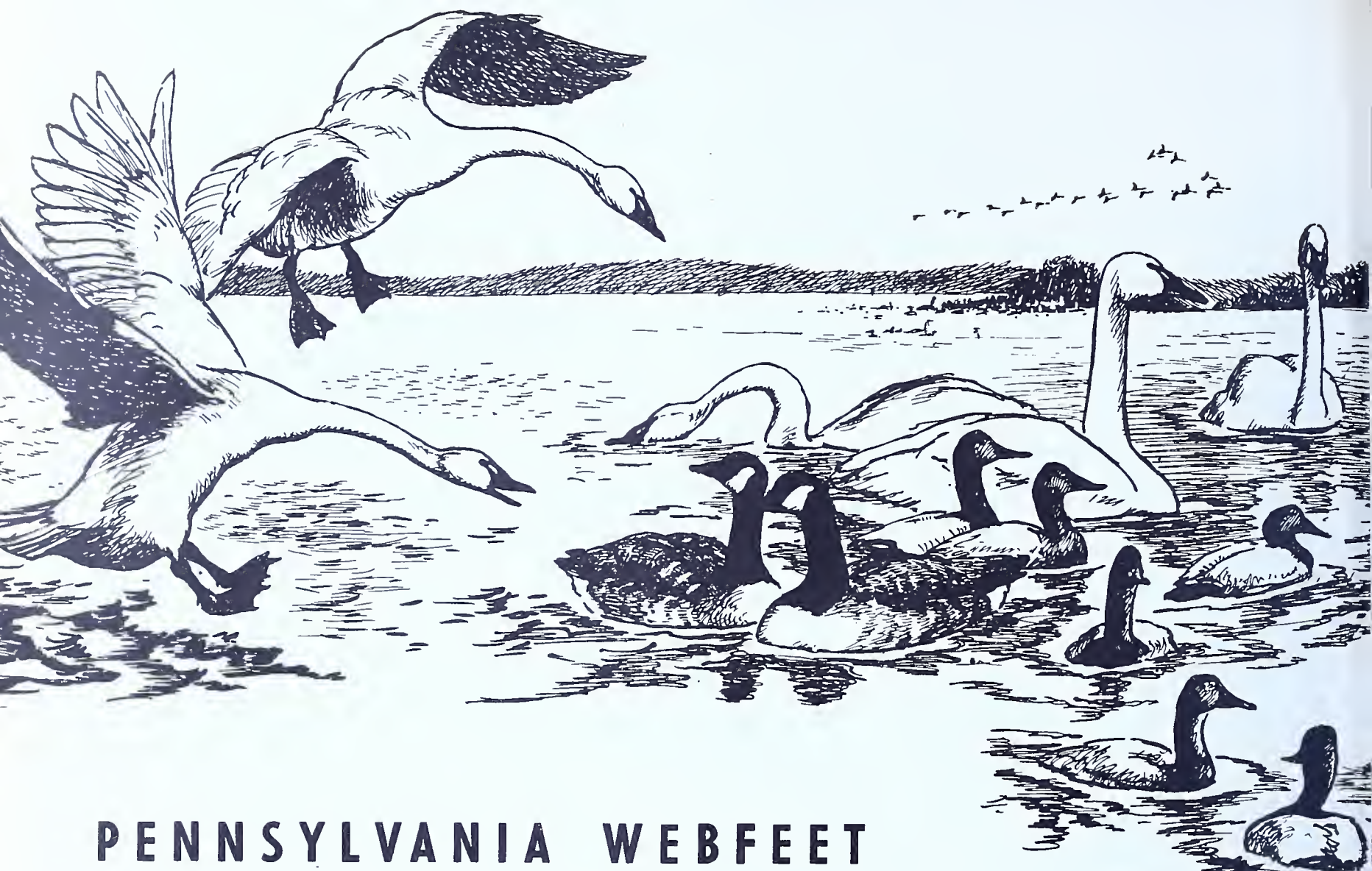
(Continued on Page 29)



The last hour and a half she nursed them on a flat rock.



Bertha had dozed off with her head on her paw.



PENNSYLVANIA WEBFEET

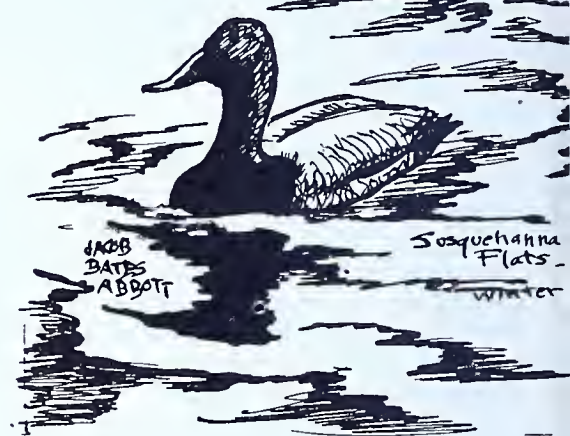
By JACOB BATES ABBOTT

PENNSYLVANIA is not one of the great waterfowl states, despite the fact that one of the biggest concentration points on the north Atlantic seaboard for swans, geese and ducks lies at the mouth of the Susquehanna River, most of whose length stretches within the Keystone State. The other great waterway, scene of some of General Washington's historic activities, that forms the border between Pennsylvania and New Jersey, harbors vast quantities of wintering ducks and geese. The sprawling Pymatuning Refuge, largest body of water in the Commonwealth, attracts 70,000 or more waterfowl every autumn. Large rafts of blacks, goldeneyes, American mergansers and scaups may be seen bobbing on the riffled waters of the partially ice-bound reservoirs at Ontelaunee, Springton and Goshenville. I once saw a white-winged scoter (a northern sea duck) in an overgrown puddle in Montgomery County; one whistling swan in the estuary of a small reservoir basin in Chester County and a pair of Canada geese among the frozen tussocks bordering a tiny pool, tucked away in the hills back of Berwyn. If you look for them you can see plenty of waterfowl, although we have few lakes of any size, within the borders of the Commonwealth that contains such an abundance of game that only two states in the country outrank it.

Black ducks, baldpates and mallards seem to be the most abundant species at Pymatuning; I usually see more pintails than any others on the lower Delaware, below Philadelphia. Ruddy ducks have become increasingly common in the last few years in the

lower width of the Delaware and in the reservoirs of Chester and Delaware Counties. Buffleheads, goldeneyes and occasional blue-winged teal and old squaws occur in these same waterways. I am speaking now of fall and winter ducks. Pennsylvania's typical summer residents are mallards, blacks and wood ducks. Besides these, baldpates, pintails, blue-winged teal, a few shovellers, redheads, ruddies and ring-necked ducks nest in the Pymatuning Refuge and other suitable localities.

Ducks, like humans, have specific racial characteristics. Most ducks nest on the ground, hiding their down-encircled eggs in high marsh grass, reedy thickets or under the fallen timber of a lake shore, but wood ducks, hooded mergansers and goldeneyes nest in tree holes. Ducks, too, have distinctive flight positions. Eiders, for instance, have their legs placed far apart on their bodies and they come in to sit down clumsily, somewhat as a side-paddle river boat might. The same is true in a more modified way with scaups, ruddies and goldeneyes. They pitch in for the landing with their webbed paddles set full, waving in the breeze. These species, together with canvasbacks, must scamper along the water for a take-off. Blacks, mallards, pintails and teal jump off the water, straight up, the first down-stroke of their stiffly-held wings pushing the surface beneath them as they spring erect. The short wings of heavy goldeneyes beat rapidly to carry the freight and the wind singing through their slotted flight pinions gives them their name—whistlers.



Susquehanna Flats! A name to conjure with in the Valhalla of old-time can hunters, this wide-mouthed junction of river and bay once afforded the best canvasback shooting on the Atlantic seaboard. And the webfeet haven't all vanished from there, either. Last Thanksgiving time there were over ten thousand Canadas, whistling swan, canvasbacks and scaups off the Perryville shore. But thanks to some right thinking, intelligent game laws **THAT ARE ENFORCED**, you can no longer fill a boat with canvasbacks, for the Baltimore and New York markets, that you blasted the life out of from your sink-box battery, ringed with decoys. Automatic shotguns are out, and so are pumps, unless they're plugged to hold only three shells; so are young cannon, mounted on the prow of a flat boat. This latter engine of destruction was the punt gun. You got a ten-foot length of 3- or 4-inch pipe, lashed it on your skiff or punt, with the muzzle

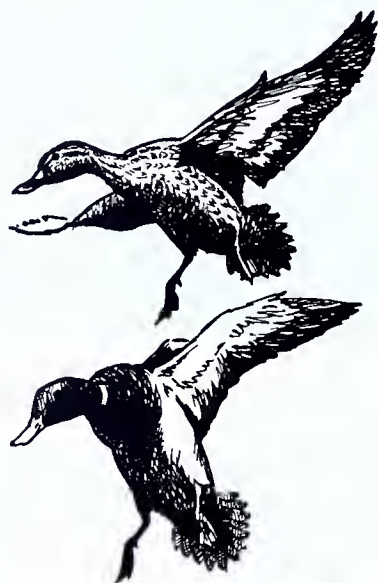
pointing forward; loaded it with a half-dozen pounds of BB's, nails, scrap iron and any other odds and ends you found lying around in the cellar; added to this lethal mass sufficient black powder to blow up a small building, and then let fly at a raft of sitting ducks when your brush-covered gunboat had drifted, or was propelled within range. Similar sportsmanship finally knocked out fifty million passenger pigeons.

If you journey down to Maryland's Perry Point, which juts into the wide mouth of the Susquehanna, between late November and early April you will see, at varying distances offshore, four or five thousand whistling swans, eight or ten thousand Canada geese and some pretty impressive rafts of canvasbacks, scaups, mergansers and ring-necks will be scattered through the noisy fleets. Those swans really talk it up; no cheer-leader would have any fault to find with their spirit. You would think that the ghosts of all the departed hound packs of a hundred years were baying when the on-shore breeze carries in the clamor of a few thousand swans. It is a wild, haunting chorus to hear and once heard, you will carry its memory with you and see again, with your inner eye, the sweep of the leaden bay, fretted with silver wavelets, marching against the chilling gusts of the on-shore blow. The swirling greys of scudding clouds feather out to hold the ceiling low and obscure all but a jagged patch of cold, bright, azure sky. The low hills of the eastern shore make a dark smur on the horizon and the nearer brushy islands are etched blackly against them. Compact rafts of birds, like gunboats at anchor, ride the choppy ripples—dark islands of floating waterfowl, topped by a forest of black periscopes, mark the massed hordes of geese; solid islands, notched and eroded with snowy inlets and ravines which define the outlines of the compact flotillas of the swan hosts. Incoming flocks stretch wavering skeins across the low arch above the horizon.

Why are these thousands of geese and swans spending the winter at the mouth of a Pennsylvania river? They were born and later raised young of their own from north-

western Hudson Bay to the Alaska Peninsula, and a Maryland bay is at quite some distance from Hudson's. You may remember that, during the late war, our Government asked would-be travellers, and not altogether academically, "Is this trip really necessary?" Whatever the reaction of the travelling public was to this question, the answer, when applied to northern-breeding waterfowl is definitely "Yes!" Ducks, geese and swans which summer throughout the Canadian Provinces to the Arctic Circle, must, in winter, find open water to live. Water means life to waterfowl, rippling, liquid water, not ice. They feed in it, sleep on it and use it as a runway when taking off. When the northern autumn begins to lock up the ponds, lakes and bays of their homelands, the webfeet must move south.

Pennsylvania is directly on the wide flight lane of one of the four great air highways of migrating waterfowl. For this reason the establishment of Pymatuning's 3,670 acres of



JBA

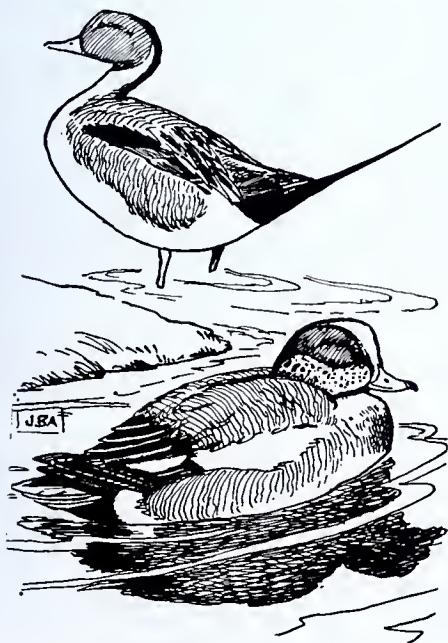
marsh and water refuge became an important haven for immense numbers of travelling ducks. Here they could stop off for food and rest. Many, from the spring flight, would remain to nest. Thus the Pymatuning State Game Refuge stands as a monument to long-awaited ambition fulfilled and to the really far-sighted and intelligent planning of your Game Commission. Good duck hunting is found in the marshy acres of the Pymatuning and Conneaut Lake district, surrounding the refuge, and thus the sportsmen's interests are closely interwoven with those of the conservationists—as they most certainly should be in any enlightened community, where true sportsmen can enjoy never-to-be-forgotten days afield with the knowledge that they are harvesting a safe proportion of the wildfowl population. This sort of clear-headed shooting, carried on by sporting gunners, manifests only contempt for the furtive selfishness of game hogs.

In 1935 a national all-time low of an estimated 30,000,000 duck population alarmed sportsmen but it rose to 140,000,000 in 1943, dipped seriously in '45 and '46, but since then

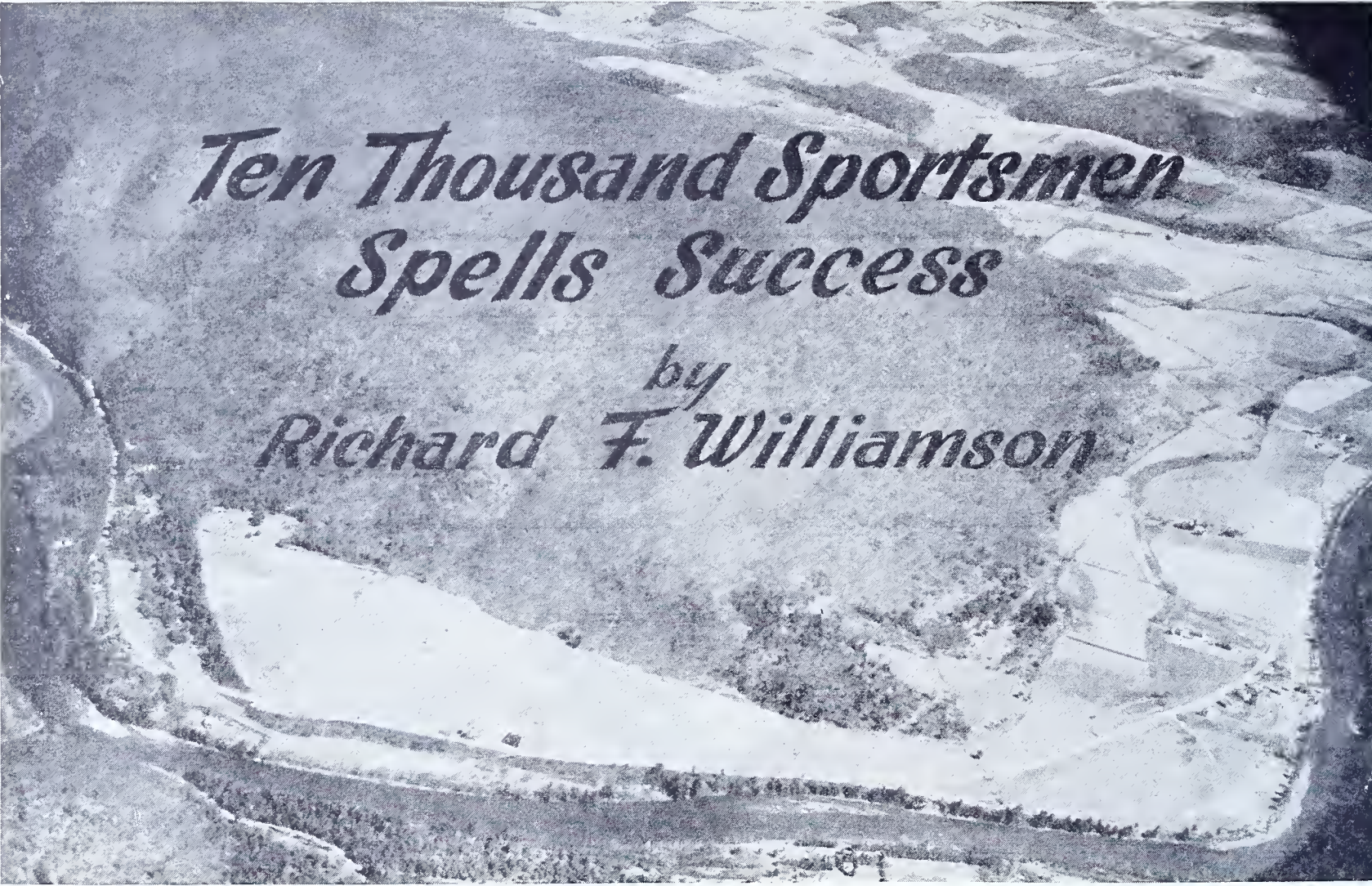
has shown an encouraging increase, largely due to some mighty sensible efforts on the part of Fish & Wildlife and Ducks Unlimited. 2,127,598 duck stamps were sold for the 1948-49 season. Discounting stamp collectors, over two million hunters sent up a leaden barrage to make the flyways perilous for ducks and geese during last fall's migration. Waterfowl gains were further threatened last season by flagrant violations of hunting laws. A Senate spokesman said recently that nation-wide game law offenses were the worst in more than a decade and told the Senate that illicit shooting could well cancel out possible increases in duck and goose populations.

The Fish & Wildlife Service reported that about 17,000,000 ducks and geese were taken last season and 3,000,000 more were lost through crippling. Mallards are the most plentiful of the ducks wintering within the United States, accounting for nearly a third of the total population. Pintails are next in abundance.

Wildfowl have intrigued the talents of artists for years; for centuries if European painters are included. Accurate drawings of Nile geese appeared in Egyptian decorations and hieroglyphics a thousand years before Christ was born. Our country has produced three painters whose pictures of waterfowl are preeminent among the top wildlife artists of the world: Louis Agassiz Fuertes, whose bird portraits are unexcelled anywhere; Lynn Bogue Hunt's accuracy of detail, flight positions and feather structure show a painter's skill, photographic power of observation and a gunner's knowledge of game on the wing; Frank W. Benson brings to his canvasses and etchings the sound ability of one of America's great painters, combined with the keen hunter's joy in sweep of sky, bay and marsh as his quarry pitches in toward the blind. England's Archibald Thorburn was one of the greatest bird painters in the world. His recent death left a gap in the ranks that will be difficult to fill. Peter Scott, son of the heroic and tragic Antarctic explorer, would rank as Britain's top painter of waterfowl today. The giant figure among them all—the great artist-naturalist who could paint birds and animals as they look in their native haunts, and whose skill in this field has yet to be equalled—was Bruno Liljefors, painter extraordinary to the King of Sweden.



JBA



Ten Thousand Sportsmen Spells Success

*by
Richard F. Williamson*

MEN who direct the affairs of the Consolidated Sportsmen of Lycoming County have solved the problem of keeping 10,000 members busy and happy and of preventing their organization from being just another organization of hunters and fishermen belly-aching for more fish and more game and cooking up high-pressure moves on the state legislature and the game and fish commissions.

They have done it with a program—a program that provides for the whole family of every one of its members.

At the same time they have not forgotten the primary purpose of a sportsmen's organization—the promotion of good sportsmanship, conservation, and enjoyment of the outdoors.

And they have put into operation a program for teen-agers that is attracting wide attention. Two thousand boys and girls are regularly enrolled members of the organization.

This year's president of the Consolidated Sportsmen of Lycoming County is Ralph R. Holtzman, of South Williamsport. He is a long-time worker in the organization, his chief duty during the last several years being that of providing entertainment for the monthly meeting of the organization's board of directors.

His staff includes Frank Bren, first vice president; Roy C. Peterman, second vice president; Don Starr, secretary, and John Whiting, treasurer.

These men are good leaders.

But the real machinery of the organization lies in the board of directors—which is made up of 250 men representing every one of the dozen communities in the area over which the organization works.

Also, there are nine regional vice presidents whose job is keeping personal contacts among the group's far-flung membership.

These officers and directors meet monthly in Grange halls and churches throughout Lycoming County. They eat together, discuss business, and enjoy movies and other entertainment.

Interests of the organization are directed by 24 standing committees, including groups on such important matters as angling and research, game, fish, legislation, forestry, stream improvement, vermin control, and clean streams.

Five big events mark the annual program of the group.

With so many members, the annual picnic is a two-day affair, usually the last Wednesday and the last Saturday of July. There is the annual election of officers, held in January in the court house in Williamsport. A banquet, with entertainment, is on the calendar each spring. And also there is an annual field day for junior members, usually held in May, and a turkey shoot for adult members each autumn.

Leaders of the organization believe that any group of sportsmen has an obligation to help itself, to do something to improve field sports.

So the Consolidated Sportsmen this year are raising 3,000 ring-neck pheasants and 100 quail, with a goal of 5,000 in 1950 and 10,000 five years hence. Some of them are being raised on property owned by the group, and others by individual members.

The work is under the direction of John H. Bender, chairman of the game and forestry committee, with George Ungard in direct charge of the bird raising program.

Besides caring for the birds, this committee has supervised the planting of two and a half acres of corn, to be used for feed.

The junior program is under the supervision of Raymond R. Rommelt. It functions through a big committee, consisting of student and faculty representatives from every high school in Lycoming County.

This committee is given a voice in the management of the organization. A field day is held annually for the teen-agers. And the boys and girls are permitted to help in the stocking of trout and game.

Four of the boys this year were sent to the state conservation camp for two weeks, with all bills paid by the organization.

Probably the biggest asset of the organization is the Sportsmen's Memorial Grounds, along Loyalsock Creek about 12 miles from Williamsport. It's a top asset for two reasons—it gives the members a lot of work to do and it serves as a recreation center for members and their families.

Incidentally, the sportsmen are not selfish about it.



A goal of 5,000 in 1950 and 10,000 five years hence.

One part of the grounds is reserved for use by the Boy Scouts—and there are tents on this area almost every night during the summer. In addition, the public is permitted to use the picnic facilities, and this past summer there have been mighty few open dates, so great has been the public response.

The Memorial Grounds is composed of what were once two farms. The area covers well more than 200 acres. The most recent financial statement of the organization places its value at \$26,500. It is a memorial to members of the organization who made the supreme sacrifice in the Second World War.

It is used for the annual picnics and for the junior field days. Meetings of the board of directors are held there on occasion.

Among its facilities are an archery range, baseball diamond, ice skating pond, two picnic groves, pistol and rifle ranges, quoit and horseshoe courts, skeet and trap installations, two bathing beaches (one a shallow one for youngsters), a playground with slides and swings for the children, a first-aid dispensary, rest rooms, a bathhouse, and a parking lot.

There is a large refreshment stand, and a "chuck wagon" made from an old bus tours the area on busy days.

Lighting is from a cooperative line that runs through the area, but the organization has a portable generator for use in emergencies, and a public address system also has been installed.

On the grounds, also, is a large area which is fenced in and where most of the organization's birds are being raised.



One part of the grounds is reserved for use by the Boy Scouts.

The memorial area is the fruit of cooperation. William R. Waldeisen, executive of a manufacturing company in Williamsport, is chairman of the committee which supervises the Memorial Grounds. But the vast majority of the work has been done—and will be done, for the project is by no means complete—by the members themselves.

Business men and companies throughout the county have made contributions of money and materials to the grounds—without any public solicitation of assistance.

Somebody has called this area the poor man's country club. That is because the only admission fee is a membership card in the Consolidated Sportsmen—and that costs only \$1 a year for Senior and 50 cents a year for junior members.

What is more, if a man is a member of the organization he can take his wife and children to the Memorial Grounds any time he pleases.

It is hoped, in time, to add to the facilities at the grounds some interesting features. One will be a chapel. Another may be a fishing pond for children. Another is envisioned as a series of trails on the mountain beside the area for hikers and photographers.

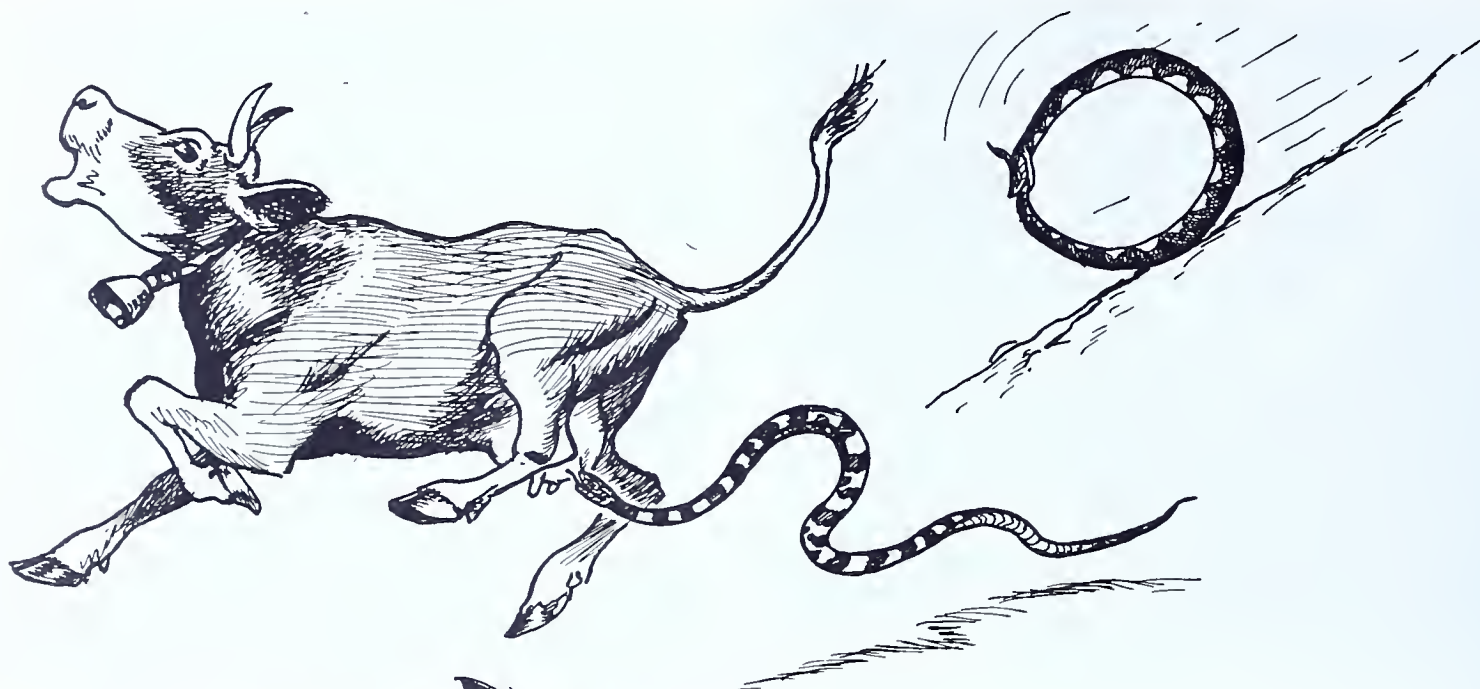
It's a mighty big project already, and a growing one—but it is just a part of the whole program that keeps 10,000 men and women and 2,000 boys and girls actively interested in the program of one of the largest organizations of sportsmen in the Eastern United States.



The Consolidated Sportsmen raised 100 quail last year.



Among its facilities are skeet and trap installations.



NATURE FACTS AND FALLACIES

By BILL WOLF

ANYONE having to do with wildlife and things in nature is asked some amazing questions. Is it true that snakes can milk cows? Do bats get tangled in the hair? Can the bot-fly travel 800 miles per hour? Is it really true that rain is due soon when a mourning dove's call is heard?

The answer to all these questions, of course, is "no," but you would be surprised to know how many persons think the right answer should be "yes." Things that have been accepted as facts so long are often hard to dispel from the minds of persons who ordinarily show good judgment and common sense. Thus, this article is going to deal with the untruth, the whole untruth, and nothing but the untruth!

For some reason snakes and other reptiles are the victims of more mistaken human ideas than any other members of the animal world. Perhaps this is due to the universal terror that snakes inspire in persons who know little about them. Then, too, the wrong interpretation is often given to something seen.

Take rattlesnakes, for example. They are fairly common in Pennsylvania and fairly common, too, are the old wife's tales about

them—tales that are believed to be true facts by many individuals. Let's start with the rattle that gives the snake its distinctive name. A lot of false stories have been circulated and believed where that rattle is concerned.

In the first place, it doesn't really rattle. Buzz is the more proper term to use. There is nothing inside the individual buttons to cause a rattle, but when the tail is vibrated, the buttons rub together and set up a buzzing sound. Furthermore, no matter what you have heard to the contrary, you can't tell a rattler's age by its rattles on the theory that it gets one new button a year. It usually—but not always—gets a new rattle each time it sheds its skin, which means it may get two to four rattles in one year. An occasional snake may have fourteen or even fifteen rattles, but few get over ten no matter how old they are or how often they shed their skins, because the end rattles keep wearing off.

If you are one of those persons who believes that a rattlesnake always sounds a warning rattle before it strikes and, also, must coil before it strikes, stay away from rattlesnakes. Both beliefs are fallacies. They

certainly do not always rattle before striking and neither do they always strike after rattling. And no snake coiled like a rope can strike. They must throw their necks into an S-shaped loop and then straighten out the "S" to carry the head forward in the strike. That's why a rattler can't strike more than half the length of its body and is accurate only at shorter distances.

Rattlesnakes admittedly are dangerous, but chances of being bitten by one are very small. There are only two important rules for safety: When in snake country, look where you walk and look where you reach. If, however, you should be bitten, don't depend upon these fallacies for a cure: Whiskey, cauterization, potassium permanganate crystals, kerosene or chicken's entrails. Whiskey only helps speed the poison through the system, cauterization by gunpowder or potassium seals the poison in, and the others are quack cures. Put a tourniquet above the wound, suck out as much poison as possible and walk—don't run—to the nearest doctor.

How many times have you heard persons refer to "slimy old snakes?" Well, snakes aren't slimy, not the least bit. They are

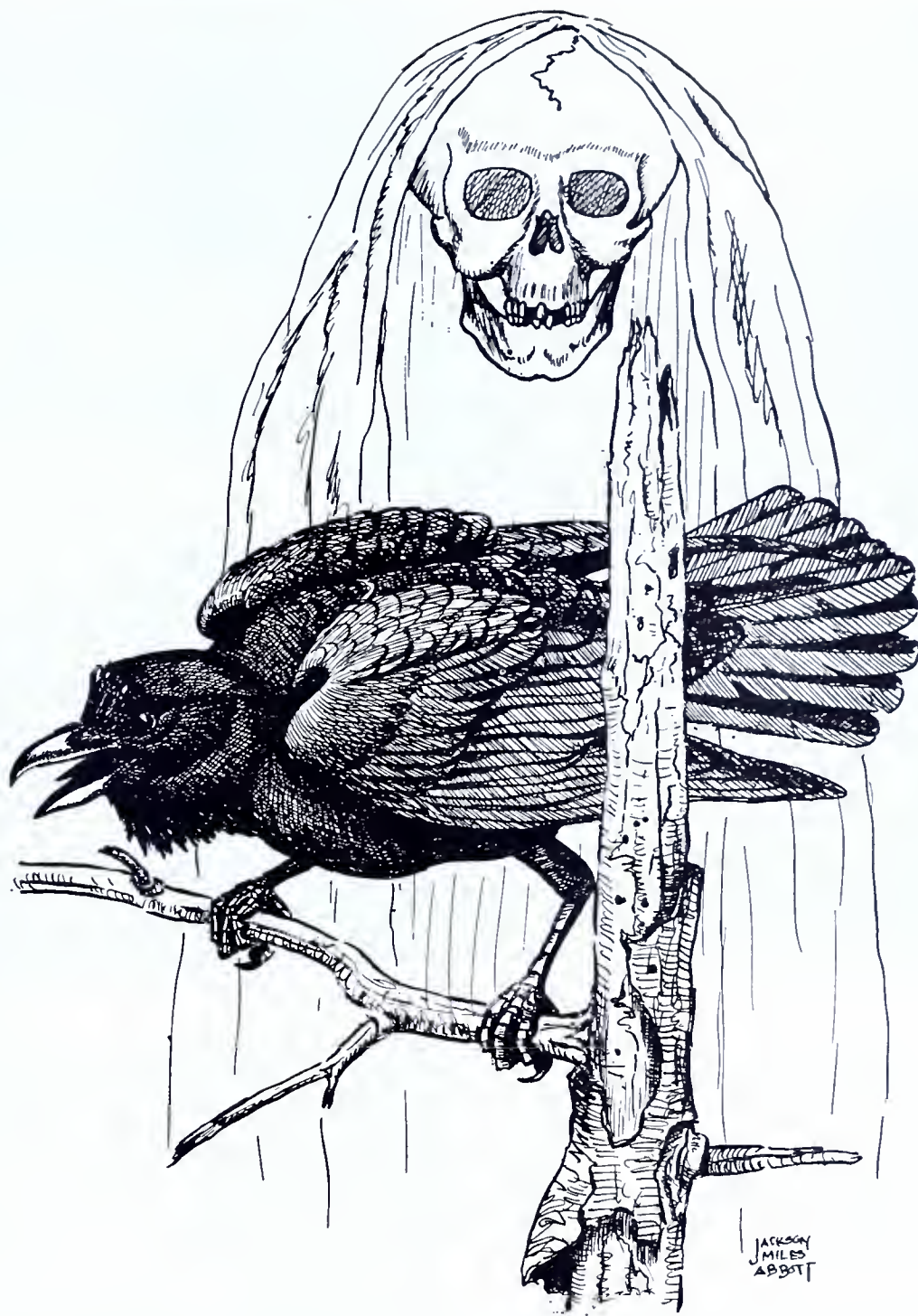
dry-bodied and clean—drier and cleaner by far than most animals. Although snakes are cold-blooded, they are not necessarily cold to the touch. They will be almost exactly the same temperature as their surroundings, and if it's a hot day, the snake may feel warm.

Snakes cannot hypnotize their prey. You hear many stories about how the glittering eyes of a snake held a squirrel helpless until it was devoured. Don't believe them. A snake has a glittering stare simply because it doesn't have any lids to its eyes. It has to catch its prey by speed or surprise. Furthermore, the "stinger" is only its tongue, and certainly not poisonous. The forked stinger is very sensitive and very soft, utterly incapable of "stinging" anything.

Snakes do not swallow their young when danger threatens. In fact, snakes don't bother much with their young after they are born. This fallacy sprang up through erroneous interpretation of some facts. Some snakes give birth to live young; some lay eggs. When a snake that has live young is killed, it sometimes has within its body unborn young. This gives rise to the false idea that it has swallowed some of its offspring to protect them.

The spotted king snake, also known as the milk snake, is one of several species credited with milking cows. In all rural sections, you hear stories of some farmer who has wondered why "good old Bossy" suddenly has gone dry. Then, one day, he came upon a milk snake milking Bossy in the pasture. You never meet this farmer, however, but always hear the story from someone who knows someone who saw a snake milking a cow. Stop and think a minute and you will see at once how impossible this is. Even if a snake could milk a cow, it couldn't hold much in its slender body and surely could not contain enough milk to make a cow go dry. Furthermore, no cow in the world would put up with being milked by a reptile with a mouthful of sharp little teeth. Finally, as far as is known, no snake is able to suck.

The blue racer, a black snake, has a bad reputation which it doesn't deserve. It supposedly chases persons and can run faster than a horse. Neither belief is true. It actually will follow persons out of curiosity, but if the person being "chased" simply turns around and moves toward the snake, it will leave in a hurry, fear replacing curiosity. It is a fast snake, but can't exceed much



more than three and a half miles per hour.

The blow snake, or puff adder, cannot blow or spit poison at anyone for the simple reason that it has no poison. It does puff up and hiss when cornered in a threatening manner, but you can have a lot of fun with this vicious looking but harmless snake by merely calling its bluff. Threaten it with a stick and it will roll over and play 'possum, pretending it's dead. Or it may even bite itself—but it will never harm you.

There are plenty of fallacies surrounding other things found in the wild, too. A lot of persons keep a respectable distance from porcupines which are encountered in some parts of Pennsylvania because they just know that the "porky" can "throw its quills." What they mean by that is, they believe the porcupine can shoot its painful darts right straight from its back. Nothing could be farther from the truth. It's true the quills leave the skin readily when something brushes against them, but the porcupine can't move them a fraction of an inch by "shooting" them.

Or take the beaver. It is a fairly intelligent animal and a clever one, with its ability to fell trees, build dams, store food under water and such—but it is not the amazingly brilliant creature some persons would have us believe. For instance, it does not carry mud and small branches on its broad, flat tail, and it does not use its tail to slap the mud into place when chinking a dam. It hugs such materials to its breast with its forepaws. Furthermore, beavers do not always fell trees so that they drop near water. If the tree leans uphill, it falls uphill despite the beaver's cutting.

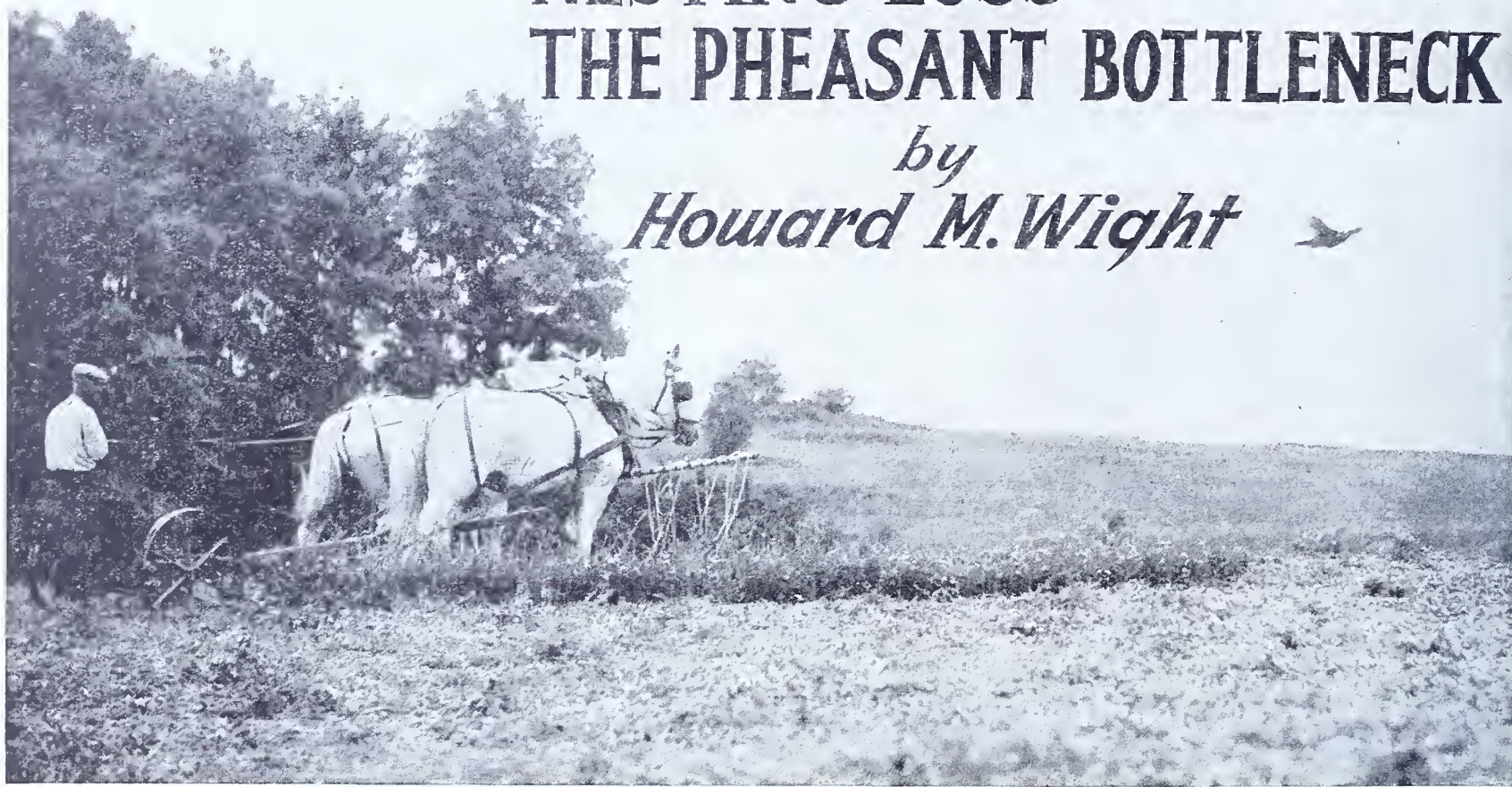
Bats are victims of several unfounded beliefs that do them great injustice. If any bat ever got entangled in anyone's hair, it would be more dismayed than the human being. They will do their utmost to avoid a person, and would be no more likely to get tangled up in human hair than they would to fly into a tree trunk. Furthermore, they do not carry bedbugs, as many persons believe. They do have parasites which re-

(Continued on Page 27)



NESTING LOSS — THE PHEASANT BOTTLENECK

by
Howard M. Wight



THE age-old question of which comes first, the chicken or the egg, will probably never be answered; but if one twists the question and asked which will contribute most to the sport of pheasant hunting, an egg or chick, there can be only one answer—the chick. The reason for this is that a chick is living proof that a clutch of pheasant eggs has successfully passed through the most vulnerable period in the life of these birds. It means that the critical period of little over a month, during which time the eggs are laid and incubation is carried on, is over, and the young brood is in the capable care of the hen.

How dangerous is the nesting period? What are these dangers and what can be done about it? These are questions for the sportsman to consider.

During the past spring and summer, the writer has been engaged in studying the nesting efforts of ringnecked pheasants on 2,540 acres of farmland in Lower Macungie Township, Lehigh County. This area was selected because it was the site of a previous pheasant study carried on by Pierce Randall ten years ago when the area supported an excellent pheasant population. The present study is carried on under the direction of Dr. Ward M. Sharp, Leader of the Pennsylvania Cooperative Wildlife Research Unit; Mr. Robert D. McDowell, Chief of the Wildlife Research Division, Pennsylvania Game Commission, and Dr. P. F. English, Professor of Wildlife Management, Pennsylvania State College.

In the course of the past nesting season, 77 nests were located by the writer on the study area. Of these 77 nests studied, only

17% succeeded in hatching. What caused such a large percentage of the nests to be destroyed? The answers are many and varied, but the mowing machine surpasses all other causes of destruction. Table I indicates the fate of the nests studied.

TABLE I
Fate of All Pheasant Nests Under Study for 1949
Farming operations

Fate of Nest	Number of Nests	Percent
Hatched	13	16.9
Destroyed		
Haying	47	61.0
Plowing	8	10.4
Planting potatoes	1	1.3
Building fence	1	1.3
Harvesting small grains	2	2.6
Predators		
Skunk	1	1.3
Crow	1	1.3
Deserted	1	1.3
Observer	2	2.6
	77	100.0

Table I shows that haying destroyed 61 percent of the nests studied. It was about six times as serious as the next single cause of nest destruction.

Paper No. 55 from the Pennsylvania Cooperative Wildlife Research Unit. The Pennsylvania State College, The Pennsylvania Game Commission, The Wildlife Management Institute, and The U. S. Fish and Wildlife Service Cooperating. Authorized for publication on Aug. 30, 1949 as paper No. 1537 in the journal series of the Pennsylvania Agricultural Experiment Station.
Graduate Assistant, Department of Zoology and Entomology, the Pennsylvania State College.

The location of the nest in a safe situation is the key to nesting success, but the pheasant hens in their selection of a nesting site obviously fail for the great part in finding this safe location.

The hen, when locating a nesting site, is probably governed by four things. One, the nest will be located in close proximity to the area that the cock, with whom the hen is associated during the breeding season, selects as his crowing area and defends jealously from the trespasses of all other cocks. Second, the hen will need to select a nest site that affords good concealment, for it is the subtle camouflage of her nest that prevents its destruction by the nest predators inhabiting the area. Third, the hen will have to select an area for nesting that will offer a minimum of human and animal disturbance during the period of little over a month while the nesting is carried on. Fourth, the hen seeks a place in which the young birds, on hatching, will be provided with protection of cover and at the same time, be able to satisfy their food demands in the form of insect life on which the young subsist to a great extent while they are small.

Of the 77 nests studied during the past season, 63 were located in hay fields, 4 were in barley, 3 in wheat, 2 along roadsides, and one each in wasteland, corn stubble, plowed ground, farmyard, and orchard. From the location of the nests studied it was evident that the hay fields were by far the most attractive cover for nesting hens.

There are several reasons why hay fields are the most desirable nesting sites for pheasants of this locality. Probably the most important is the abundance and equal distribu-

tion of hay fields on the farms of this diversified agricultural region. Wasteland and orchards are undoubtedly safer places in which to nest, but are not abundant nor well distributed in this area. Another reason for this preference of hay fields as nesting cover is the fact that the peak of nesting occurred during the last half of May and no other farm crop offered as excellent cover as the alfalfa and clover did at this time.

The question sometimes arises why fence rows with their dense vegetation are not utilized to a greater extent as nesting cover. The answer to that question is found in one of the requirements of nesting pheasants, namely, freedom from disturbance. It has long been understood that the fence rows serve as lanes of travel or "highways" for animals inhabiting the farming areas, and thus nests placed in fence rows would be subject to predation and harassment by animals utilizing these "highways."

Barley and wheat, from the standpoint of safety from destruction by farm machinery, probably offer the safest cover for nesting. At the time when the majority of the first nests were being established, however, these small grain crops were still too short to offer sufficient concealment from above, and thus were not attractive to hens as nesting sites. It was apparent from the study of grain field nests that the majority of the nests constructed in barley and wheat were late nests established after the grain attained such a height so as to afford excellent concealment.

From the foregoing discussion it is apparent that the majority of the pheasant hens of this area prefer to make their first nesting attempts in hay fields. The following deals with the fate of these hay field nests. Table II illustrates the fate of the 63 hay field nests during the first cutting of hay, as well as indicates the extent of mortality associated with the mowing operation. Of

the 63 hay field nests, only 7 or 11.1% of the nests hatched. Mowing destroyed 45 nests and killed 21 hens, or one-third of the hens nesting in hay fields.

TABLE II
Fate of Hay Field Nests

Fate of Nests	Number of Nests	Percent	Number hens killed
Hatched	7	11.1	0
Destroyed			
Farming operations			
Mowing	45	71.5	21
Plowing	7	11.1	1
Building fence ...	1	1.6	0
Predators			
Skunk	1	1.6	0
Observer	2	3.1	0
	63	100.0	22

Spring plowing of alfalfa and clover in preparation for planting corn accounted for 7 nests and 1 hen, but this plowing was done early in the spring and thus resulted in the destruction of only a few earlier nesting attempts.

It is apparent that nests placed in hay fields are relatively safe from predation, as only one nest was destroyed by skunks, and none were found that had been broken up by that usually serious nest predator—the crow.

The pheasant hunter is thus faced with a two-sided dilemma that threatens his sport. One, the fact that the hen pheasant prefers hay fields for nesting cover, and two, that these same hay fields offer little safety and even less promise that the nest will hatch.

Two factors important in determining the extent of hay field nest destruction by mowing machines are: (1) the date of the peak period of nest establishment, and (2) the average date of mowing the first cutting of hay. It is the number of days in the interval between these two dates that will determine the fate of the majority of hay field nests. Thus if it takes 38 days for a nest of 12 eggs

to be laid and incubated, the interval between the beginning of the nest and the mowing of the hay field must of necessity be at least 38 days for the nest to hatch. The length of this nesting interval before mowing thus determines the fate of the hay field nests.

During the past nesting season it was possible to determine the date of nest establishment (the date on which the first egg was laid) for 48 nests. Table III presents this data by one-half monthly intervals.

TABLE III
Approximate Dates on Which the First Egg Per Clutch Was Laid

Date of 1st Egg	Number of Nests
April 1-15	3
April 16-30	8
May 1-15	30
May 16-31	7
	48

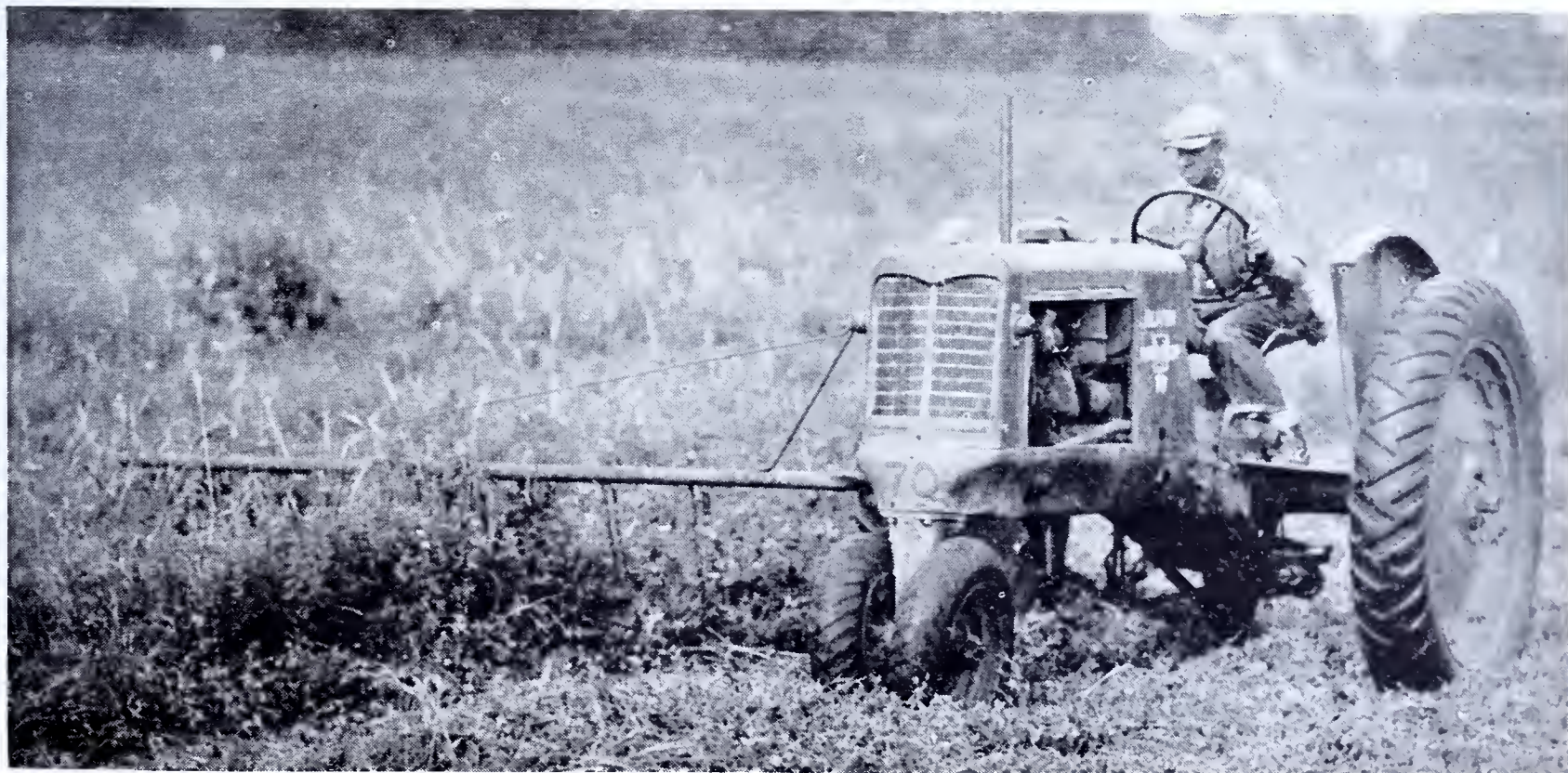
Table III shows that a peak was reached in the first half of May for the beginning of nests. Table IV presents the mowing dates for the first cutting of 287 acres of hay on the study area.

TABLE IV
First Cutting Dates of Alfalfa and Clover by Weeks

Week	Acreage	Percent of total crop	Running total	Number nests destroyed
May 15-21	4	1.3	1.3	1
May 22-28	41	14.3	15.6	5
May 29-June 4 ...	55	19.1	34.7	13
June 5-11	117	41.0	75.7	20
June 12-18	62	21.6	97.3	5
June 19-25	8	2.7	100.0	1
	287	100.0		45

The peak of mowing occurred during the second week in June, when 75.7% of the

(Continued on Page 25)



An Introduction to Stockmaking

BY E. STANLEY SMITH



fig. 1. THE FIRST STEP—CUTTING OUT THE MORTISE FOR THE BOX MAGAZINE.

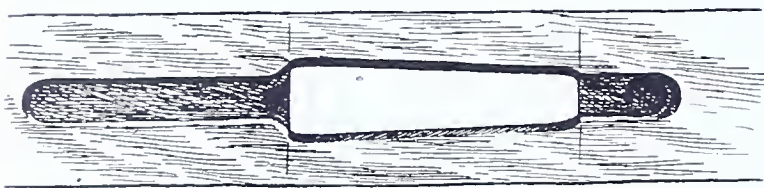


fig. 2. THE SECOND STEP—ENTIRE GUARD-MAGAZINE INLETTED. (F.N. MAUSER)

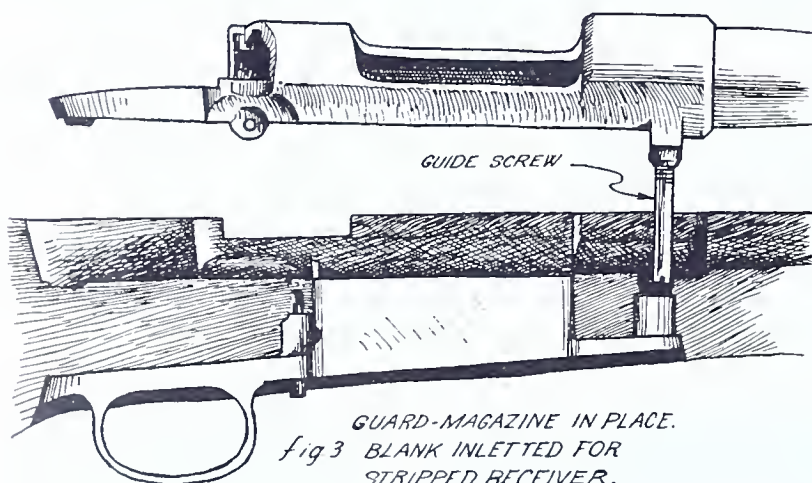


fig. 3. GUARD-MAGAZINE IN PLACE. BLANK INLETTED FOR STRIPPED RECEIVER.

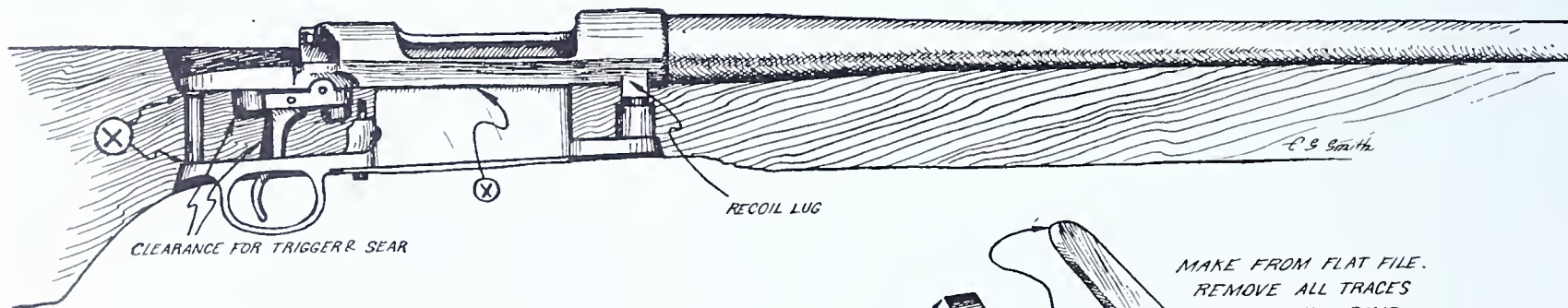


fig. 4. X-RAY VIEW OF INLETTED STOCK OF F.N. MAUSER ACTION & BARREL IN PLACE.

TO OBTAIN CONTINUOUS TENSION ON GUARD SCREWS METAL PARTS OF MAGAZINE-GUARD & RECEIVER SHOULD NOT TOUCH. DANGER POINTS ARE MARKED (X)

Part III: Inletting rifle barrels and actions.

RIFLES aren't the most difficult firearms to stock; some of the side-lock double barreled shotguns make rifle inletting look like kindergarten stuff. But, make no mistake about it, rifle inletting must be done right or the gun won't be worth the powder it takes to blow it up (with a plug in the muzzle.) Perfect bedding of the action and barrel will result in the proper barrel support and constant guard screw tension so essential to accuracy. Furthermore, a carefully inletted stock is not likely to split from recoil.

As the Springfield seems to be the most popular number with the amateur stockmaking fraternity we'll start with a description of the inletting required by this type rifle. Recently the F. N. Mauser action has become quite widely used by American gun addicts, and since it is similar to the Springfield the inletting procedure can be adapted to either with trifling changes. Both of these rifles have a one-piece magazine and guard, consequently the magazine-guard is inletted first, followed by the receiver and barrel.

On guns with a separate magazine the receiver and barrel are usually inletted first. The first step is to lay the barrel and action on the side of your blank so that the center of the bore is $1/16$ inch below the top edge of the blank. With a pencil mark the bottom outline of the guard as accurately as you can, then draw a parallel line to allow about $1/4$ inch waste allowance. With a band or compass saw rip off a strip of stock wood following this line and terminating at the pistol grip, allowing plenty of wood at the grip, of course, to permit final shaping. This cut is made merely to remove surplus wood and to have a parallel surface as a guide to inletting the guard and magazine. Square up this cut and smooth it to take scribe and pencil marks, then score a center-line down its length.

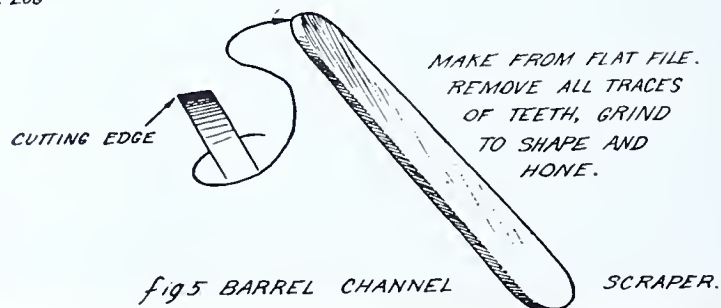


fig. 5. BARREL CHANNEL

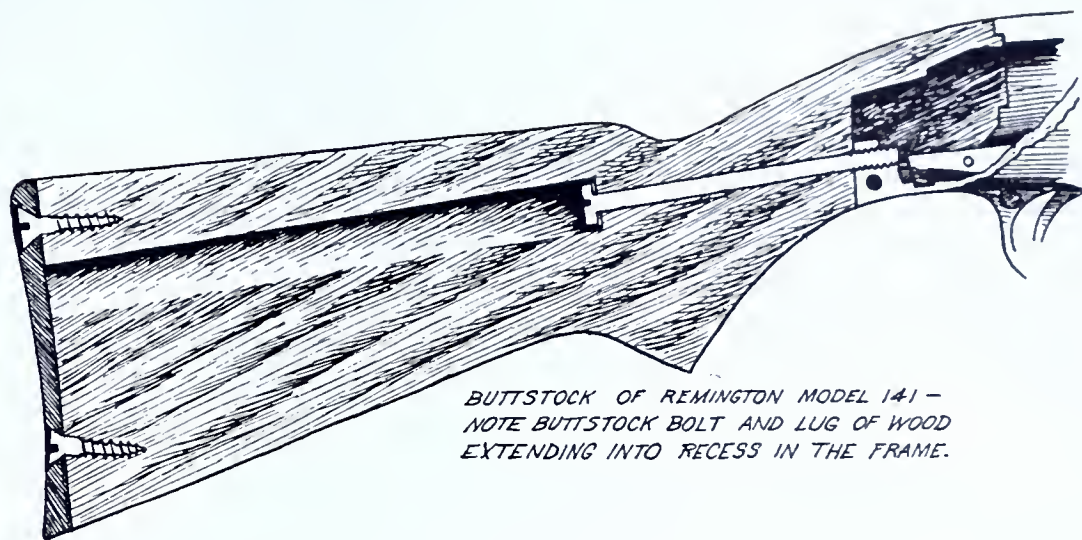
SCRAPER.

Now accurately mark the location of the front and rear ends of the box magazine on the underside of the blank, and with a steel scale and dividers lay out the sides of the magazine and mark the radii in the corners. Do all this layout work as accurately as you can. Now with a $\frac{3}{4}$ inch bit bore a series of holes up through the stock inside this outline to remove the bulk of the wood. With a flat chisel trim out the remainder of the wood, keeping just the thickness of toad hair inside the lines at the bottom of the stock. Form the rounded corners with a gouge. By checking with a try-square resting on the top edge of the blank you can chisel the ends of the mortice perfectly straight, but the sides must be sloped to conform with the angle of the magazine. Check these cuts where they emerge top-side to be sure the mortice is not tilted to one side or another.

Now slip the magazine into the mortice, (or I should have said, "try to.") With a bit of paring with a chisel it should enter part way. Be careful to maintain a snug fit at front and back of the magazine, particularly at the back where it forms a sort of recoil shoulder. By laying a try-square on the right side of the stock with the blade across the bottom of the magazine you can keep the inletting square with the blank, which is extremely important. Spot with Prussian blue as you go. You will understand now why it is so important to mark these outlines carefully and inlet them right up to the line—it saves lots of time-consuming work seating the various parts and if the measuring and cutting is properly executed there isn't a bit of danger of removing too much wood.

When the front tang extension touches the wood, spot it and bore a hole the proper depth to receive it. Then, when the remainder of the guard bears on the wood, outline it very carefully with a scribe. Rout out the wood inside this outline to almost the desired depth and with the aid of Prussian blue seat the entire magazine and guard. Remember, we allowed $\frac{1}{16}$ inch on the top edge of the stock for waste, and as we need $\frac{1}{32}$ inch for final bedding, we will inlet these parts to within $\frac{3}{32}$ inch of their final position as measured from the top edge of the stock. Instead of making flat-bottomed recesses like those on Service stocks to accommodate the tang around the trigger guard bow and ahead of the magazine, fit the wood carefully to the contour of the metal to fill the milled-out spaces in the center.

With the guard in place, drill a hole the size of the screw through the front guard screw hole. This should pop out right on the center line at the top of the blank. Now insert one of the long headless guide screws in the front hole in the receiver and coat the bottom of the receiver with Prussian blue. Free the hole in the stock for the recoil lug extension to enter—then insert the guide screw into the hole until the receiver rests on the wood and clout the whole works with a mallet to show the location of the various projections. Cut out the recoil lug mortice, carefully fitting the rear surface that takes up the recoil thrust. Carve out the recess for the end of the tang, almost to its full depth and width. Now mark off



the dimensions of the flat part of the receiver and inlet that carefully and as near to the finished size as possible. Then mark the shape of the half-way mark on the receiver, keeping in mind that the right side is not as wide due to the loading port. Score this outline lightly to prevent splintering and carve out the wood to correspond to the radius of the receiver.

If you are inletting the receiver and barrel in one piece it will now be necessary to lay out and form the barrel channel. By marking the correct barrel diameter at various points along the top of the blank you can establish the location of the barrel channel, then, with the frequent use of a straight-edge, score this outline accurately with a knife to prevent splintering the edges of the channel when roughing out the wood. Now, using a good sturdy gouge and a mallet cut out the wood between the outlines. As the proper depth is reached you must put away the mallet and do the pushing by hand. Bed the barrel and receiver together, spotting, scraping and paring as you go. Be careful not to burst out the wood alongside the cut-off housing or at the gas-vent on the right side of the receiver—that can be right agonizin'.

At this point you might do well to introduce yourself to the use of scrapers to whisk off minute shavings of wood. These can be made from files, ground to shape without drawing the temper. (fig. 5) Hone them to a perfect edge and they'll do a lot of scraping before requiring resharpening. Incidentally, these can be made in different sizes and shapes and will be found useful for inletting various parts.

As the inletting progresses the lip on the rear of the magazine should fit up into the receiver. Let in the receiver and barrel until the former is within $\frac{1}{32}$ inch of the top of the magazine. Now drill a hole for the rear guard screw bushing, assemble the rifle, insert both guard screws and draw them up tightly. Tear down the rifle and take a generous cut off all the places spotted with Prussian blue, except those near the tip of the fore-end. In case you wonder what the heck goes on, here's the low-down. It seems in order to get maximum accuracy in a rifle the barrel should not only be firmly supported by the fore-end but should also be subject to a slight upward pressure to deaden vibrations and minimize warpage. To

create this pressure it is necessary to inlet the other portions of the barrel and receiver relatively deeper than that part of the barrel near the fore-end tip. Several fittings with the guard screws pulling the action into place should enable you to take out somewhat more than $\frac{1}{64}$ inch in the inletting, which will suffice. Now bed the barrel and action perfectly, relieve the wood where it binds too tightly, (let it grip the sides of the barrel pretty hard, though,) and you will find the receiver and magazine fit together perfectly with just a hairline of daylight between them to allow setting up the guard screws really tight, as they should be. Now you can disassemble the gun and by the use of a drill and small chisel form a slot for the trigger and sear. This winds up the inletting job.

Enfields, Winchester Model 54 and 70's, Remington M. 30's, etc. have a separate magazine driven into the receiver. Such rifles can best be inletted by fitting the barrel and action first, then inletting the magazine from the top of the blank.

On the Krag, a recess is cut into the blank to receive the "cellar-door" magazine. With this out of the way the inletting proceeds in an orthodox manner. Don't cut away too much surplus wood from the underside of the blank until the inletting is completed as this, in combination with the deep magazine cut-out, will dangerously weaken the stock.

Most .22 bolt action clip-loading rifles are simple to inlet, the barrel and receiver being cylindrical and rather plain. These parts are inletted first, then the clip mortice is formed and the guard screw holes drilled.

Two-piece stocks are generally held in place by tang screws. On some rifles, (Model 99 Savage, for instance,) both tangs are integral with the frame; on others one tang is removable. To inlet the latter type the frame and stationary tang are usually inletted first. Watch these two-piece stocks—they often have lugs extending from the face of the stock that fit inside the frame for support and to prevent splitting. Don't forget to allow extra length on your blank for these hidden projections.

Some two-piece stocks are equipped with those wretched contrivances known as buttstock bolts. No doubt about it, these things really make a stock good, solid and service-

(Continued on Page 24)



OUTDOOR KIDS

By Hal H. Harrison

“WHAT ARE you going to do tomorrow, Billy?” asked Jane on Friday evening in early March as her brother stood in front of the basement workbench admiring a bluebird house he had just painted.

“Oh, I don’t know,” he answered rather disinterestedly. “Perhaps I’ll go over to Anderson’s woods and catch some butterflies,” he added.

“Sure, sure, I know. And after that you’ll shoot a couple of tigers and wrestle a buffalo,” Jane snapped. “Why don’t you answer my question?”

Billy laid down his paintbrush and turned to look at his sister who eyed him in complete disgust.

“I’ll tell you what I’ll do,” he offered. “If I can’t catch a butterfly in Anderson’s woods tomorrow morning, I will buy you the biggest banana split in town.”

“Butterflies in March? I don’t believe it,” Jane insisted. “What kind of butterflies are out now?” she asked.

“Thaw butterflies, like the mourning cloak,” was the answer. “If you want to see one, come along tomorrow.”

Jane’s curiosity was aroused, so instead of going up to Margot’s house to play with dolls Saturday morning, she went with her brother to Anderson’s woods. The day was just right for Billy’s purpose. It was warm and sunny. Sweaters without big coats were quite comfortable. Pal, their setter dog, showed his delight with the spring weather by tearing wildly through the woods in a frenzy of unleashed energy.

In fact, it was Pal who found the first mourning cloak butterfly. The children were attracted to the insect by Pal’s wild leaps into the air as he tried to capture it.

“There goes a butterfly,” cried Billy, racing after it with a home-made net in his hands. “And there goes your banana split,” he added gleefully.

It was not an easy task to snare this fast-flying purple butterfly, and it was only after it had landed on a low limb of a sapling maple that Billy’s lunge for it was successful. The boy removed it from the net and Jane clamped on the lid of the big jar as her brother dropped it inside.

For a few moments they stood looking at the butterfly



fanning its wings inside the jar. The wings were deep velvety purple, their sharply scalloped margins bordered with yellow. The underside of the wings are entirely different from the uppersides. The undersides are the color of bark and have much the same appearance. Here, then, was a case of camouflage. When the butterfly comes to rest on a tree and folds its wings, it just disappears from view as it blends into its surroundings.

“I suppose it is called a ‘thaw butterfly’ because it comes out when the spring thaws occur,” Jane suggested.

“That’s right, Jane, but this butterfly does not come out of anything, like other butterflies that come out of cocoons or chrysalis-like nests. At least not in the spring. This is one of the butterflies that hibernates through the winter as a butterfly.

“You see,” he continued as his sister listened, “most butterflies spend the winter in some other form, like eggs or cocoons, but the mourning cloak and the question mark and the admiral and the painted beauty and some more that belong to the same group hibernate like some of the animals.”

“Well, where do they stay all winter,” Jane asked.

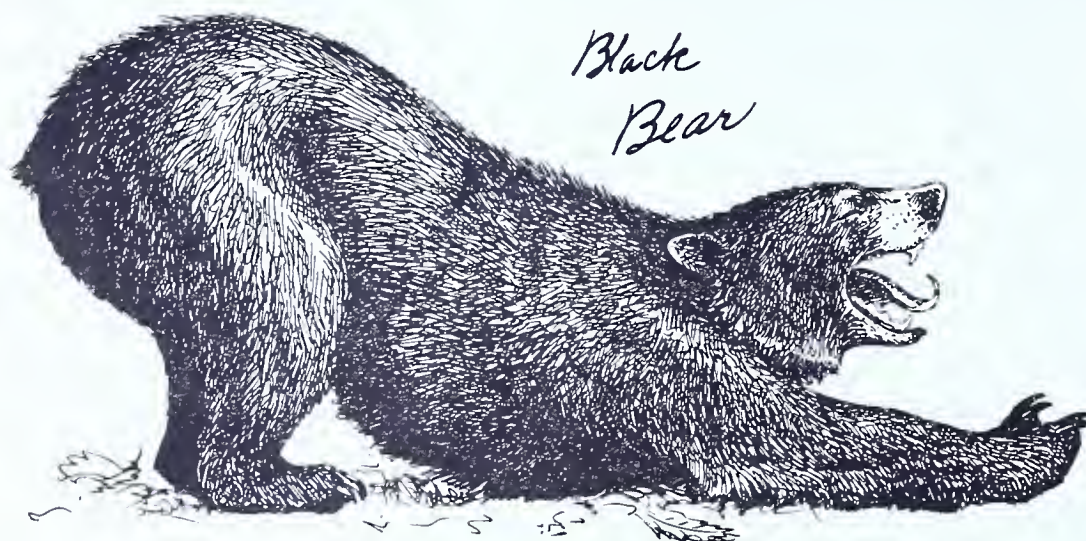
“I don’t know exactly,” Billy replied, “but I suppose they get in between pieces of bark or in logs or maybe between rocks. When they are awakened in the spring, they lay their eggs and die. Most of the other butterflies that you know, lay their eggs in the fall and die then.”

Pennsylvania Record Rack



The past Pennsylvania deer season yielded this new record whitetail deer. The big buck was shot by 16 year old Al Prouty, of Williamsport, on the grounds of the Susquehanna Ordnance Depot the morning of December 5, 1949. Weighing only 150 pounds hog-dressed, the animal carried a 24-point rack with a spread of $32\frac{3}{4}$ inches, the beams of which were over 4 inches wide at the base.

Although deer carrying racks with more points have been bagged by Pennsylvania hunters, never before has a rack with a greater spread been reported. The previous record deer carried a rack with 18 normal and 7 "key ring" points with a spread of $27\frac{3}{4}$ inches and was downed by Lawrence Leggett, of Smethport, in 1943. In addition to establishing a new Keystone State record, young Prouty's deer comes close to tying the generally accepted North American whitetail. This buck was shot in British Columbia in 1905 and carried a 26 point rack with a $33\frac{1}{2}$ inch spread.



*Black
Bear*

Sleepy Heads

BY N. R. CASSILLO



Skunk



*Brown
Bat*



Groundhog

IN all likelihood you may recall reading the newspaper story appearing a few years ago about the storekeeper in a small Michigan town who regularly "hibernated" for the winter. He took to his bed with the coming of cold weather and remained there until the return of spring. The newswriters covering the yarn neglected to add that he had to periodically interrupt his "sleep" to take nourishment as well as to perform the necessary bodily functions. In this connection it may prove interesting to note that in some of the northern Russian provinces where food is extremely scarce and the winter climate severe, the people have adopted a mode of living in the winter that is akin to hibernation. But man lacks the specialization that makes it possible for certain furry mammals to hibernate so successfully.

The foregoing account may have stimulated some of you into recalling the stories of the several so-called "sleeping beauties" which were so rife but a few years back. You may also recall that the sleepers were afflicted with a disease and, besides, had to have a tooth or two knocked out to permit the insertion of a tube carrying regularly administered nourishment. Accordingly, only a potion as potent as that given Rip Van Winkle by his Catskillian kegler colleagues could produce in man a state of dormancy which we commonly refer to as hibernation.

Yet, despite the contradictory aspects of the above, there are mammals which regularly hibernate. The chances are that most readers can name the seven mammalian sleepers. For the benefit of those who may not recall all of them, they are the bear, the groundhog, the chipmunk, the raccoon, the skunk, the little brown bat, and the jumping mouse.

Hibernation is not much of a feat for the so-called cold-blooded creatures such as insects, fishes, frogs, toads, turtles, and snakes. But for mammals like the seven sleepers whose normal body temperatures may range as high as from 95 to 100 degrees, that state of torpidity during which the bodily functions



*Jumping
Mouse*



Raccoon



Chipmunk

are reduced to a low point is even more amazing than the fact that they again swing back into the full tempo of living when the time for them to do so is at hand. And, the latter, it may be added, is a feat not to be sneezed at. How the brain, nerves, eyes and other delicate body parts survive the experience is something that science cannot explain. Indeed, during hibernation the vital processes are at such a low ebb that to rudely awaken some animals frequently proves fatal. Also, if animals are not sufficiently fortified with fat they may not have enough vitality to survive a long sleep.

Unlike insects and even some of the lower vertebrate animals like certain fishes, hibernating mammals must keep the frost out of their vitals. Insects, however, are likely to succumb to a succession of freezes and thaws. Frogs cannot, as is often stated, be completely frozen, since death ensues if the heart is frozen.

Although most people are familiar with the term *hibernation*, it is almost a certainty that only a comparative handful have ever heard of the phenomenon known as *estivation*. The process, like hibernation, involves the reduction of the bodily functions to an absolute minimum during periods of extremely hot, dry or otherwise inimical conditions. Certain species of western ground squirrels accumulate fat during the early summer when food is abundant and temperatures favorable, and then during the hottest periods of the summer take to their burrows to estivate. Usually their dens are so deep as to remain unaffected by the driest weather and hottest temperatures. Some individuals emerge for a short time in the late summer or early fall, but most of them continue their summer sleep into that of winter, in some cases remaining in their burrows for as long as eight months.

The champion estivating backboned animal is probably the African lung fish. This fish may estivate for periods of many months, burrowing down into the mud of the river bed when the water evaporates during the dry season. The fish together with its "cocoon" of dried mud are canned and shipped to various cities in this country. Even after remaining for additional weeks on the shelves of biological supply houses, upon being removed from the can and placed in water, the fish carries on as though there had been no interruption of the regular routine.

Hibernation and estivation appear to be practically the same as ordinary sleep so far as physiological phenomena are concerned except that the temperature of a hibernating animal may drop considerably, sometimes being the same as the surrounding atmosphere. Usually, however, it is higher. The heart beats are greatly reduced (frequently from 7 to 10 per minute), and breathing is frequently suspended for hours at a time. The digestive system becomes completely inactive. Muscles take on the rigidity of death. Indeed, when a groundhog is dug up, the hibernating creature is as inert as though it were dead. Some animals remain in this condition for months at a time. Others for periods of only a day or two. Warmth, loud noises or light will arouse most of them in a matter of minutes.



Temperature is only one of the factors that determines when animals go into their long sleep. If the creature is in good flesh he may betake himself to his den even while temperatures are still quite agreeable. Old bears as well as those which have not taken on sufficient fat have difficulty in settling for the winter sleep. Even if they do manage to become comatose they sleep fitfully and awaken often. Bears have been known to sleep so lightly as to be aroused by a leaky roof.

The chipmunk is the lightest sleeper of the famous seven. In fact, throughout most of their range they do not truly hibernate. They merely remain in their comfortable burrows and regularly draw on their abundant quantity of stored food. During periods of extremely severe weather they must feel like many people, sleepy and reluctant to go out. On the other hand, temperatures of between 50 and 60 will cause pocket and kangaroo rats to go into prompt hibernation. During the unusually warm month of January, the chipmunk making his home under the cement walk leading to our back porch was seen to emerge twice to feed on sunflower seeds in the nearby bird feeder. On both occasions the temperature was above 60 degrees.

Skunks and raccoons like their big flat-footed relative the bear, take on quantities of fat but do not store up food. Skunks living in the north remain in their dens all winter and are frequently not seen for days or even weeks during the worst part of the winter. The raccoon is a much lighter sleeper than the skunk, retiring to his hollow tree when the weather gets uncomfortably cold and remaining there until it again becomes mild enough to venture forth.

Bats hibernate in buildings, hollow trees, caves or other places where temperatures are likely to remain in the high forties. The ceilings of many caves are often festooned with hundreds of the little inverted sleepers. If a torpid bat is taken into a warm room it will slowly reawaken without any ill effects. As a matter of fact, after it momentarily surveys the situation it is likely to promptly draw its wings about the furry body and once again lapse into sleep. Awakened bats will frequently take food and lap up quantities of water. Incidentally, captive bats will do very nicely on lean hamburger, bits of it placed on the point of a pencil being readily taken. At least one species of bat found in Pennsylvania is known to migrate to warmer climates.

It is safe to say that the groundhog is the best known of the seven sleepers, the only animal with a day of its own on the calendar. While the groundhog's actions on February 2 are of absolutely no importance in forecasting the weather of the following six weeks, nevertheless, much interest is evinced by the animal's emergence on *his* day.

Some years ago I kept a young woodchuck in a wire floored inclosure provided with a tile-lined underground den. At the first sign of cold weather he would begin cramming his burrow with quantities of hay with which he was provided, pulling in the last batch after him and thereby effectively closing the entrance. However, a carrot or two or fresh cabbage leaves would continue to entice him out of his snug quarters until a real winter chill permeated the air. He sometimes came out in February, but seldom on Groundhog Day. This winter (1949) at least two reports were current of groundhogs being seen abroad during the extremely mild month of January.

Even in a normally cold winter the sleep of the groundhog here in Pennsylvania is not uninterrupted, for on sunny winter days if the mercury is not too low, Br'er Chuck may be seen foraging for any available bit of green herbage. They emerge for the summer when the weather is still inhospitable and before there is much for them to eat. Some observers are of the opinion that the groundhog would fare better if it were to begin and end its sleep two to three weeks later. In most of Pennsylvania it retires about mid-October when there are still some days of pleasant weather to be expected, and reappears in March before vegetation has made much growth.

Birds are not known to hibernate although ornithologists are even now investigating the mysteries involving the case of the several comatose chimney swifts that were brought to light during the winter of 1948. Who knows but what we may be on the verge of increasing our circle of sleepy heads.



Mr. J. N. Hawxhurst of Indiana told me that one rainy evening he and his son were driving in their car near Nolo when ahead of them some distance a mallard duck hit the road just like some heavy object being dropped. They stopped and examined the duck which was still warm but very much dead. Mr. Hawxhurst thought that his lights shining on the wet road appeared to be a stream of water to the duck which tried to alight and in so doing, killed itself.—Game Protector Bruce Catherman, Indiana.

On December 6 while patrolling the deer woods in Burnside Township, Centre County accompanied by one of my deputies, C. K. Wheeland of Bellefonte, I came upon a deer hunter sitting on a folding chair placed along an old log road. He was reading a Dick Tracy magazine and his rifle was leaning against a tree about ten feet away. I thought he might be crippled, but found that he was not, at least where it could be noticed. I was anxious to learn who he might be so I told him we were Game Protectors and would like to see his hunting license, which he readily showed us. Then I asked him if he had seen any deer. He said he saw one the day before but he did not think deer were too plentiful. But, as we were talking with him, four deer ran past us not more than 100 feet away; one was a nice buck. I told him if he would leave his magazine at home, he probably would see more deer.—Game Protector Tom Mosier, Bellefonte.

Despite a heavy kill of antlerless deer the past season, as many as 40 deer have been

seen grazing on one farm at night since then. Seven deer have also been killed on the highway in this district since December 10th.—Game Protector Sam Reed, Pine Grove Mills.

Most stories about deer hunters tell about them shooting first and then looking to see if their target was legal. But during the past deer season, I saw an instance where the opposite was true. As I was checking a deer on a car, I heard a rifle shot. Shortly afterwards, a deer ran out of the woods close to us. At first glance, it appeared to be a doe but as it crossed the road and came to a halt in an open field, a visible "Y" horn was very noticeable. The deer stopped about 150 feet from a woman hunter who looked the deer over but did not shoot. I called to her, "It's a legal," but still she did not shoot. After I shouted again, she exclaimed, "That's not the kind I shoot," and walked away in disgust.—Game Protector Bill Moyer, Allentown.

On December 8, Marvin Weaver, aged 16, and Donald Walt, aged 17, both of Birdsboro, paddled across the Schuylkill River below Birdsboro in Walt's rowboat to an island in the river. There are several of these islands in the vicinity, some quite large and all having dense cover. Deer have lived on them for many years and the youths were hunting for a buck they had previously seen. While hunting out the heavy cover, Weaver found a doe which had been freshly killed. It was gun-shot and still warm when found. Several men, dressed in hunting clothes, were seen on the opposite bank but were too far off to identify. The boys immediately returned to Birdsboro and notified Deputy Game Protector Carl Davis.

By the time the deputy and the boys returned to the river, it was dark, but the youths unhesitatingly volunteered to ferry the deer back to the mainland. There would not have been room enough for the three men and the deer carcass in the small boat, so the boys went over alone and with the aid of flashlights found the deer. It was dragged to the bank, loaded on the boat, and rowed to shore by these two boys with-

out assistance. It was an exceptionally large doe and dressed at least 135 pounds. There was no coal dirt around the wound and we surmise that it was deliberately shot from the opposite shore, a distance of about 75 yards. Due to the efforts of these two youths, the carcass was salvaged and turned over to a charitable institution. If all of our younger generation of hunters are as conscientious as these two, it would seem that we can look forward to some real sportsmen in the future.—Game Protector Joseph Leiendecker, Reading.

One day last June I came upon an old hunter who was sitting on a railroad track. I thought at first that he was woodchuck hunting since he carried a .410 shotgun and hunting license but upon questioning, he stated that he was hunting for weasels. At first I thought this was just a good excuse but a moment later he pulled three weasels from his coat and told me that the day before he had killed three more at the same place. Five of these were about the same size while the other was about twice as large. What really happened, of course, was that the man had found a litter of weasels and had killed the female and five of her young.

I met this man again one day last December and found that he was still after weasels but instead of hunting them, he was now using traps. In addition to weasel traps, I found that he had his game bag filled with corn that he had picked up in a corn field after it was machine picked. He went on to say that five hen pheasants and a cock bird were hanging around his place and the corn would come in handy for feeding them when the snows covered the ground. This man I judged to be in his sixties and his name is Sam Boop, R. D. 1, Millmont, Pa.—Game Protector Albert Kriefski, Lewisburg.

In a recent conversation with Mr. Lou Anderson of Muncy Valley, I learned of an unusual experiment. Mr. Anderson caught a number of foxes this fall and found them to be in very fine shape. Being interested in wildlife conservation, Anderson examined the stomach contents of these foxes and found that they had been feeding almost entirely on beech nuts. This seems to discount the many reports of foxes destroying our small game supply in this section.—Game Protector Bob Benscoter, Laporte.





There have been many places where rabbit traps have been set, but in December a new place was added to the list. On December 17 I received a phone call from Mr. H. W. Dittenhafer of York requesting me to remove a rabbit from the new house he was building. Mr. Dittenhafer had noticed signs of the rabbit in his house but when the rabbit left his tracks on a freshly painted floor, it had gone too far. Later the man saw the bunny retreat into an open cold air duct. I accompanied the home builder to his house and set a rabbit trap in the upstairs hall but somehow or another, the rabbit found his way to the cellar and was found dead down there the next day. The rabbit had apparently died of starvation.—Game Protector Earl Geesaman, York.

It has been reported to me that our wild game is able to recognize the arm of the law. Officer McCabe of the Phoenixville Police, retrieved a badly scared ruffed grouse from his garage after it had flown there seeking protection from cats which were chasing it. The grouse was turned over to Farm Game Manager George Lucas who released it on State Game Lands, the bird apparently none the worse for its experience.—Game Protector Ralph Shank, Uwchland.

One day during the month of November a doe deer paid a visit to this small community located in Butler County. The doe came down the main street which is on highway Route No. 8, attempted to cross the highway, and barely escaped being struck by a car. The doe next slipped and fell but got back up to leap through a large plate glass window in the office of Doctor Campbell. After landing in the reception room, the excited deer leaped almost as high as the ceiling. Some hunters passing by saw the deer leap through the window and immediately ran to open the door in the house. Out the deer came and continued her course down the main street to the nearby gasoline station. The station operator saw the doe coming toward the open door and quickly shut it just about the time the deer arrived. The deer then turned, leaped over a fence, and ran toward a woodlot. With the exception of a few cuts on her face, the doe was none the worse for her experience.—Game Protector Woody Portzline, Slippery Rock.

During the past bear season a cub was turned over to Game Protector Mark Hagenbuch of Bloomsburg for settlement and disposition. Hagenbuch turned the carcass over to local needy. Next day he was quite surprised at the information he received from the party who butchered the cub. While cutting up the meat, something sharp pricked his finger and upon investigating, he found an opened safety pin lodged in a piece of the loin meat just under the backbone. How it ever got there was the source of much speculation, one person advancing the theory that the mother bear must have misplaced the pin while changing diapers.

On December 10, I observed a large bird winging its way toward me. As it approached, I could see that it was a Great Blue Heron. I thought this quite unusual since most of the streams were frozen over at the time.—Game Protector Dan McPeck, Jr., Media.



On December 31st I picked up a large doe that had been killed by a car in Leroy Township. Upon dressing her out, I found that she was carrying a fawn, well developed and about the size of a mouse. This fawn was developed far enough so that the feet and dew claws were readily visible.—Game Protector Martin Shaffer, Leroy.

During the past deer season the members of the McClure Rod & Gun Club were making a drive when one of the drivers noticed a rather freshly dug pile of earth. Investigating, he looked into the only opening—a hole approximately 16 inches in diameter—to observe the sleepy face of a bear. Without advising other members of the party, the man left the line of drivers, returned to camp, jumped into his car and drove to the town of McClure to secure the services of a friend who is an amateur photographer.

Meanwhile, a small boy, son of one of the members, was following the drive and came upon the same mound of earth. He called to his father, saying that he had found a newly dug groundhog hole. The father, jokingly, told him to rout it out. The boy jumped upon the heap and found himself



completely involved in hole, bear, earth, leaves and all. The bear with great effort staggered from the scene and ran directly and promptly into a tree, almost knocking himself out completely. Finally, he regained his composure, straightened out and headed straight up and over the mountain. The original discoverer of the bear was, to say the least, disconcerted when he and the photographer returned to find an empty hole.—Game Protector Clarence Walker, Beaver Springs.

On November 28 Mr. Russel Beech of Somerset and a party of hunters were enroute to Mt. Davis to hunt deer when they saw an unusually large squirrel feeding by the road. They stopped to watch it but the squirrel decided he didn't like an audience and bounded up a large den tree into a hole. Much to the surprise of the hunters, the large bushy tail of the squirrel remained outside of the hole and a terrific commotion took place inside of the tree. Mr. Beech remarked to his companions that the tree was just so full of squirrels that there was no room for the old boy's tail. However, the racking and slashing of tail continued until one of the hunters climbed a nearby sapling and discovered a crack extending down from the hole. The squirrel's tail had slipped into this crack and was wedged so tightly that the squirrel was unable to move. Mr. Beech and the other men soon rescued the squirrel from its death trap by placing a long forked sapling under the tail and forcing it upward out of the vice-like crack.—Food and Cover Corpsman Z. R. Leslie, Division "G".



OLD ELITE

BY ALBERT

If you count yourself a deer hunter
And you are one of that hunting Elite;
That gets such a kick out of hunting
You'd much rather hunt deer than eat.

Then you doubtless know all the answers,
And without ever taking a look:
You can give all the facts and the fancies
That are down in the Deer Hunter's Book.

If you are wise in deer hunting tradition,
It is logical then to suppose
That under some certain conditions
You can tell a Buck's track from a Doe's.

If you are well up on the Blarney
And your knowledge is full and complete
Then you surely have heard of Old
Barney;
Or maybe you call him Old Pete.

The most fabulous Buck of a decade
And haven't you oft heard it said;
He is as big as a Two Year Old Heifer
And he has a rocking chair on his head.

Perhaps it's a set of step ladders
Or some such extravagant phrase:
But he is the biggest darn Buck
That you've heard of in all of your days.

He has been seen on the edge of the farm-
land
And in places where deer like to browse.
He leaves a track in the cornfield
That is almost as big as a cows'.

Or maybe it's up on the benches
Where the scrub oak and red brush
abounds
He has eight or nine points to each antler
And he weighs close to three hundred
pounds.

So wherever deer hunters forgather
There is many a tall tale adorns
This Buck with the rocking chair antlers,
This Buck with the big rack of horns.

He has been seen at the Top of Old Tussey
And down on the Williamsburg Side
Or over in Pennington Barrens.
He has no fixed place to reside.

He just roams around
Wherever his fancy
So you'd be about
A circle of five or

And when you hear
On the size of a
That some of their
ting
Because of their

Then that must be
Each community
But I'll tell you
This Buck has won

Each year the leg
And those fabulou
How he has run
Been a hundred ti

Each year some ga
But he always com
Till haven't you
If he don't live a

Yet some day som
You know they u
And now that yo
him
You are hoping t

So you look for him
You search for him
You scout through
lock
For this fabulous

Once in a while yo
In thickets of scr
You get a glimpse
Antlers
A flash of that big

Perhaps once in th
He has walked rig
Then arms and leg
And seemed to be



BARNEY

L. GUYER

at his leisure
guiles:
if you'd measure
tailes.

der hunters betting
ulous buck
nbers missed get-
geous luck.

Pete or Old Barney
e him a name
th and no blarney
nty of fame.

rows greater
rmors persist:
untlet of hunters
shot at and missed.

ets him cornered
ru quite unharmed
imes wondered
hat is charmed.

a will get him.
y do
seen him or met

ne will be you.
on the high points
wn by the streams
Laurel and Hem-

of your dreams.

ay see him
k, or thornes
ose Rocking Chair

k of horns.

open timber
at in full view;
ent all limber
part of you.

That you could stand there so helpless
Almost unable to breathe
With your arms and legs all so useless
Seems pretty hard to believe.

While Old Barney walked by almost stop-
ping
In line of your vision to boot
While you were standing there gawking
Too much excited to shoot.

It was only a fit of Buck Ague
Yet you trembled and shook like a leaf
If the thoughts of those moments still
plague you
Then you can thank the Lord it was brief.

But in those few fleeting seconds
That Buck stood out awfully clear
And left an imprint on your memory
That will last through out many a year.

After that he becomes an obsession
You cannot forget him it seems
Nor rest till you come in possession
Of this fabulous Buck of your dreams.

So when you are hunting late in the
evening
Or at dawn on those cold frosty morns
You watch for those Rocking Chair
Antlers
You look for that big rack of horns.

Well, I could almost hope you don't get
him
It would spoil all your hunting I fear
Tho you still keep right on a hunting
And get a fine buck every year.

For other bucks then will seem puny
Their antlers will seem spindly and small
When compared to Old Pete or Old
Barney
That Grandaddy Buck of them all.





Warren Field and Stream Club

The Warren Field and Stream Club is developing a dual wildlife food and cover program which clearly indicates the tremendous potentials of sportsmen's clubs in wildlife restoration. The club will pay for 500 one-year old multiflora rose planting stock seedlings for the first 25 Warren County farmers who apply for this stock. The farmers must make application for this stock through the Department of Forests and Waters and he also must agree to keep his land open to public hunting. In addition, under the leadership of Don Taft, Chairman of its Food and Cover Program, another plan to concentrate club member man-power on a 200 acre tract of national forest land. This phase involves a cooperative arrangement with the U. S. Forest Service on the Allegheny National Forest under which club members will do the seeding, planting of game food, shrubs, game stocking, release work in game food species, pruning of apple trees, and cover production under the guidance of the Forest Service personnel and with the advice of Game Commission technicians.

Brookside Rod and Gun Club

An organizational meeting was held recently for the purpose of forming a new sportsmen's club, the Brookside Rod and Gun Club of Freeland. Newly elected officers included president John Yuhas, Vice-president Andrew Fatula, Treasurer Frank De Falco, and Secretary John Gribosh. The new organization plans a block shoot in March.

Sinmahoning Sportsmen's Association

Among the accomplishments of the Sinmahoning Sportsmen's Association during the year ending October 1, 1949 were the following: Purchase and distribution of two tons of salt; purchase of 21 tons of corn; donation of 600 man-hours of labor to various club projects; maintenance of approximately 50 game feeders; and stocking of thousands of trout. Since the close of the 1949 deer season, club members have distributed 400 bushels of game feed.

Federation News Survey

Detailed information on the amount of money spent by sportsmen's clubs of Pennsylvania on wildlife restoration is requested in the second annual survey being conducted by *The Federation News*, popular and educational monthly bulletin of the Pennsylvania Federation. During 1948, a survey showed that 136 clubs spent over \$58,000 to purchase or raise fish and game, plant food and cover plots, conduct predator control programs, or to otherwise aid wildlife. Editor Charley Nehf is urging all club members to check with their secretaries to see that their organization's report is filed.

Northcentral Division

According to H. E. DuBroux, Secretary of the Northcentral Division, Pennsylvania Federation of Sportsmen's Clubs, division membership is still increasing and includes almost 19,000 members in 68 clubs. Over 350 representatives from 50 clubs met in January for annual elections of officers. E. F. Brasseur, DuBois, was elected Division Chairman, E. W. Tompkins, Vice-chairman, H. E. DuBroux, DuBois, Secretary; and Ralph Thomas, Brookville, Treasurer.

Delaware County Field and Stream Assn.

The Executive Committee and Conservation Education Chairman Bob Yake are making arrangements for a Junior Member Field Day at the Club grounds on April 1st. A free lunch will be served to junior members and instructors will be on hand to assist the boys in rifle shooting, plug and fly casting, and other activities. The Club will provide all equipment necessary to participate in the events.

Shenandoah Fish and Game Protective Association

The Shenandoah Fish and Game Protective Association, one of the largest sportsmen's clubs in Schuylkill County, was chartered in 1908 and has made steady progress ever since. It currently appropriates \$500 for restocking game every year as well as a like amount for restocking fish. In 1947 the club allocated \$1000 for a club house and grounds comprising 460 acres. Improvements made to these facilities since that time have cost an additional \$2500. The property is open to public hunting and fishing.



William Van Dyke Photo.

One feature of a conservation education program sponsored by the Tri-Valley Outdoor Club is a series of displays at club meetings. Shown here at one of these exhibits are, left to right: Carl Stainbrook, Commission Division Supervisor; Bill Hodges, Division Assistant; Bill Achey, former District Game Protector; Ted Koehler, Club Secretary, and Royal Hill, County Fish Warden.



Commission President Named Outstanding Citizen

Ross L. Leffler, assistant to the president of Carnegie-Illinois Steel Corporation, president of the Pennsylvania Game Commission, and well-known for his leadership in a wide variety of civic improvement fields, was named "Man-of-the-Year" by Pittsburgh's Junior Chamber of Commerce in January. The award is presented each year to the Pittsburgher who has done the most for the city and the selection is based on balloting by leading citizens of Pittsburgh. Mr. Leffler joins such distinguished predecessors as David Lawrence, present mayor of Pittsburgh; Dr. Edward U. Condon, famous atomic researcher; Dr. Robert E. Doherty, president of Carnegie Institute of Technology; H. J. Heinz, president of H. J. Heinz Company, and Philip Murray, president of the CIO.

Mr. Leffler has been a member of the Pennsylvania Game Commission for 19 years, serving from 1927 to 1931 and continuously from 1935 to the present. He has been its president from 1928 to 1931 and from 1940 to date. He also served as Executive Director for six weeks in 1931 without pay. He is a member of the Izaak Walton League, organized and was president of the first chapter of the League in Pennsylvania, and was a national director of the League. Other conservation activities include: member, Botanical Society of Western Pennsylvania; member, Pittsburgh Casting Club; past president, International Association of Game, Fish and Conservation Commissioners; chairman, 17th American Game Conference; and former secretary of the Western Division, Pennsylvania Federation of Sportsmen's Clubs.

A member of the National Executive Board of the Boy Scouts of America, he is also the holder of the Silver Beaver and Silver Antelope, the two top awards given by the Boy Scouts to civilians for outstanding service and achievements. He was chairman of the 1950 Community Chest Drive in Pittsburgh, which—except for the war years—met its goal for the first time since 1931. Mr. Leffler is also chairman of the Civil Defense Organization of Pittsburgh, vice-president in charge of public safety of the Western Pennsylvania Safety Council, and vice-chairman of the Red Cross Disaster Committee, Pittsburgh Chapter.

NOTICE ON BOUNTY RATES

(Excerpt from Official Minutes of January 12, 1950)

RESOLUTIONS

WHEREAS, After giving due consideration to the present predator population;

THEREFORE, BE IT RESOLVED, That the Pennsylvania Game Commission, acting under the power and authority vested in it by the provisions of Article XI, Section 1101, of the Game Law, by resolution adopted this twelfth day of January, 1950, hereby continues from June 1, 1950 to May 31, 1951, both dates inclusive, the bounty payments currently authorized for the birds and animals enumerated below, if killed in a wild state in any county of the Commonwealth during the period specified and presented in the manner and under the conditions stipulated in the Act aforesaid, except that no bounty shall be paid for gray foxes killed in the counties of Chester and Delaware (where a special Act of the General Assembly restricts the killing of foxes to the protection of personal property), the rates of payment to be as follows:

1. *Gray Fox*—\$4.00 for each gray fox, except as indicated.
2. *Weasel*—\$1.00 for each weasel.
3. *Great-horned Owl*—\$5.00 for each adult great-horned owl, and \$2.50 for fledgling which has not left the nest.
4. *Goshawk*—\$5.00 for each adult goshawk and \$2.50 for fledgling which has not left the nest.

BE IT FURTHER RESOLVED, That if and when by Act of Assembly, decision of the Court, or opinion of the Department of Justice, it shall be held lawful to kill foxes in Chester County and/or Delaware County for bounty purposes, that the bounty payable therefor shall be as herein provided; and

BE IT FURTHER RESOLVED, That the foregoing resolution shall be duly published in accordance with Section 1102 of Article XI of the Act aforesaid in the March and April issues of the Pennsylvania Game News, also to be brought to the attention of the public by news release and other sources of public information; and

BE IT FURTHER RESOLVED, That the Executive Director is hereby authorized and directed to certify the foregoing as an act of the Pennsylvania Game Commission.

I hereby certify the above to be a full, true and correct copy of the resolutions establishing bounties on certain predators killed in a wild state within the Commonwealth from June 1, 1950 to May 31, 1951, inclusive, as adopted by the Pennsylvania Game Commission at a meeting held January 12, 1950, notice of which action is published in accordance with the requirement of law.

Thos. D. Frye,
Executive Director
Pennsylvania Game Commission

Transactions of the Commission's Meeting, January 12, 1950



EDWARD SHAW

The retirement of veteran Game Protector Ed Shaw, of Leeper, has been announced by the Commission. Shaw joined the Commission in 1920 and performed a fine job on law enforcement throughout his long career. He has been in ill-health recently.

Yugoslavia Conducts Novel Sportsmen's Contest

According to Mr. George Trputac, Edinboro, Yugoslavia sportsmen have developed a unique hunter's contest to improve conditions in that Old World Country. The contest ran from May 1 to December 31, 1949 and was based on an intricate point system. Badges, some of which are shown here, were awarded to top contestants. The first contest was for individual hunters who received points for each predator killed, for holding class instruction to aid the propagation of wildlife, for submitting an acceptable manuscript on wildlife or dog training to the *Hunting Journal*, a magazine published by the Sportsmen's Federation, for trapping, for entering a hunting dog in bench shows or field trials, for banding or returning banded birds, for constructing bird houses, for collecting tree seeds, and for participating in other wildlife restoration work. The group or club prizes were awarded to clubs gaining highest scores in the following: Submitting reports to the *Hunter's Journal*, holding meetings with no less than 50% attendance, erection of feeding stations, salt licks and other game feeders, handling fur pelts, organizing dog kennels, building bird houses, reforestation and collection of seeds.



As prescribed by law, the Pennsylvania Game Commission met in Harrisburg on January 12th and elected officers to serve during the year. For the thirteenth year, the last ten in succession, Ross L. Leffler of Pittsburgh was elected to the presidency of the Commission. Mr. Robert Lamberton, Franklin, was re-elected Vice-president, and Thos. D. Frye, Camp Hill, re-elected Secretary. The Commission discussed and acted on various matters brought to its attention, including:

Resolution on death of Dr. Kilgus

RESOLUTION

WHEREAS, Dr. H. E. Kilgus, a Member of the Pennsylvania Game Commission continuously from April 22, 1943 to November 12, 1949, when he succumbed following a brief illness; and

WHEREAS, Dr. Kilgus was an ardent conservationist, energetic in his promotion of the Game Commission's program and a true friend of sportsmen, farmers, landowners, and nature lovers; and

WHEREAS, His death is a serious blow to the Commission and the many other associates and friends to whom his energetic progressiveness and efforts were always inspiring;

NOW, THEREFORE BE IT RESOLVED, That we, the Pennsylvania Game Commission and the staff, express our sorrow over the loss of an associate and friend whom we greatly esteemed and whose memory we shall ever honor and cherish, and we hereby extend to his bereaved family our deepest sympathies.

BE IT FURTHER RESOLVED, That a copy of this resolution be spread upon the minutes of the Pennsylvania Game Commission, a copy sent to the Office of the Governor, and a copy forwarded to his son Edward.

Artificial Propagation of the Black Duck

The Commission decided to assist the research studies of the artificial propagation of the black duck by authorizing the gathering of approximately 100 black duck eggs on the Pymatuning area.

Opening Dates for 1950 Game Seasons

In order that people who are required to file applications for vacations at the beginning of the year may have information concerning the opening dates of the hunting seasons, it was decided that the opening dates for 1950 will be as follows:

Small Game—Wednesday, November 1.
Bear—Monday, November 13.
Deer—Monday, November 27.

Purchase of Varying Hares

The Commission approved the purchase of 300 varying hares, or snowshoe rabbits, from the Sand Hill Game Farm of Babcock, Wisconsin, for \$3.50 each, f. o. b. Babcock, with the understanding that special care will be given in the release of these animals. It was also decided to assist sportsmen's clubs in purchasing varying hares, if interested, along with the Commission order so that clubs might avail themselves of a lower price for a larger number ordered.



RODNEY P. SCHMID

The voluntary resignation of Rodney Schmid, Land Utilization Assistant in Division "B" became effective on December 5, 1949. Schmid joined the Commission in 1932 and has served faithfully and earnestly as a Game Protector and in land management work.

STOCKMAKING—from Page 13

able,—but, oh murder, what they do to a guy who doesn't own a lathe or drill press! If you're in those shoes and insist upon hacking out a stock for a Remington Model 141, for instance, the first thing to do is to inlet the tang the best way you know how. With that done, locate that threaded hole in the tang projection either by the use of a pointed center screw or by spotting with a heavy coat of Prussian blue. Then mark a good, black pencil line on the right side of the stock exactly parallel to the place where the hole *should* go.

Now comes the fun! At the spot on the butt where the large hole should begin, start a bit to bore a hole the proper size to receive the head of the bolt and the washer. Do your durndest to keep the bit lined up—as the old man said, "Watch it up and down and gee and haw." As far as I know there's no earthly way to be sure where the bit's heading for, but it had better be really on the beam. When you've bored to the required depth turn the stock around and start boring from the tang recess with a bit the size of the bolt body. The idea is to meet the other hole exactly head-on. It can't be done, of course, but it makes an interesting mark to shoot at. When boring the large hole always use a bit somewhat larger than the washer or bolt head so the alignment doesn't have to be 100% perfect. If the bolt won't enter the small hole look through the large one towards the light to determine in which direction they are out of alignment. Then heat a large rod of steel red hot and insert it in the hole, pressing it against the side that needs "moving." Sounds like a crude way to do it, but it's better than throwing the stock away—the next one you made would probably turn out worse, anyway.

As a rule, fore-ends for two-piece stocks aren't difficult to inlet. The most notable exception is the slide-action such as the Remington Model 141 or 14. If no power tools are available these are inletted by bor-

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NESTING LOSS—from Page 11

first cutting of hay had begun, and 39 of the 45 nests had been destroyed. It is apparent from Tables III and IV that there is insufficient time between the peak of nesting and the peak of the first cutting of hay for very many of the nests constructed in hay fields to succeed.

Weather played an important part in the cutting time of the 1949 hay crop, as little rain fell after May 22, and June was a drought month with only .34 of an inch falling in the entire month. This drought allowed the farmers of this area to proceed undelayed by weather in harvesting their hay crop. Mr. Hacker, the Lehigh County Agricultural Agent, felt that most haying had been a week to ten days earlier this year than in preceding years.

It is interesting to note that several farmers on the study area, when discussing with the writer the causes of the pheasant decline, indicated that the date of making the first cutting of hay has changed considerably in the last 20 years. Most farmers agreed that the longest day of the year, or about June 21, had been considered the proper time to begin making hay, but in recent years they have begun the first cutting around the first week in June.

When asked why they started earlier, several reasons were given. First, there has been a large decrease in the amount of timothy hay grown. This decrease came at the same time that tractors began to replace horses as the farm power source, and, since timothy is primarily a hay for horses, lesser amounts were grown as the tractors gained wider use of the farm. Timothy, which does not mature in this area until the latter part of June, was sown with red clover and the hay was not cut until the timothy matured. Second, most farmers now feel they obtain a better quality hay when the first cutting is made in the early part of June at a time when the clover is in half bloom, then at a later date when the clover is in full bloom. Third, the increasingly large acreage of alfalfa grown by farmers of this area, from which in normal years 3 or 4 cuttings are made, has also resulted in earlier cutting dates for the hay crop. Dehydrating processes have encouraged the early cutting of alfalfa.

All of the above changes in farming have resulted in a decreasingly short interval of time between the nest establishment and the first mowing. Too little time remains at the present for the hen to lay her eggs and incubate her clutch before the cutter bar will pass over her nest exposing the eggs and perhaps killing the hen.

It is apparent from the foregoing discussion that nesting loss for the great part is associated with the lack of safe nesting cover that is well distributed, and abundant in this area of intensive general farming. Pheasants are forced to utilize what is available at the time nesting is beginning, and thus when the hen pheasants select hay fields as their nesting cover, the majority of these nests are doomed to destruction by

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The Red-Shouldered Hawk In Pennsylvania

By ROBERT D. McDOWELL

On various occasions from 1924 until 1947 Sutton, Luttringer, Langenbach, Latham, and the writer analyzed stomach contents of winged predators taken in Pennsylvania.

During this period many Red-shouldered Hawks were examined. Figure 1 indicates the counties from which 163 such birds were taken.

It is necessary to present the stomach analyses in two different tables. Because Langenbach, Latham, and the writer recorded each individual of every prey species (except insects) it is possible to combine their findings in Table 2. Sutton and Luttringer recorded only the appearance of each diet item; therefore, their individual reports are included in Table 3.

Since the bulk of the Red-shouldered Hawk's diet consists of harmful or neutral species this bird deserves the protection it is afforded in Pennsylvania.

TABLE 1

Distribution Records of 163 Red-shouldered Hawks in Pennsylvania

Allegheny	5	Lebanon	2
Beaver	1	Lehigh	4
Bedford	1	Luzerne	1
Berks	10	Lycoming	3
Bradford	1	Mercer	6
Bucks	13	Monroe	1
Chester	6	Montgomery	9
Clearfield	1	Montour	1
Clinton	2	Northampton	7
Columbia	2	Perry	6
Crawford	4	Philadelphia	2
Cumberland	2	Schuylkill	1
Dauphin	16	Snyder	2
Erie	1	Somerset	1
Fayette	3	Sullivan	1
Forest	3	Tioga	3
Franklin	3	Venango	3
Fulton	5	Warren	3
Huntingdon	7	Washington	2
Indiana	1	Wayne	1
Lackawanna	1	Westmoreland	2
Lancaster	1	Wyoming	1
Lawrence	2	York	5

TABLE 2

Diet Chart of 84 Red-shouldered Hawks

Food	Occurrence	Percentage
Mice	68	42.50
Insects	31	19.38
Snakes	23	14.38
Shrews	12	7.50
Crayfish	5	3.12
Poultry	3	1.87
Passerine Birds	3	1.87
Unidentified Birds	3	1.87
Frogs	3	1.87
Cottontail Rabbit	2	1.25
Unidentified Mammals	2	1.25
Lizards	2	1.25
Bobwhite Quail	1	0.63
Rat	1	0.63
Toad	1	0.63
Total	160	100.00

TABLE 3

Diet Chart of 95 Red-shouldered Hawks

Food	Occurrence	Percentage
Mice	38	35.85
Insects	14	13.21
Snakes	10	9.43
Passerine Birds	9	8.49
Poultry	7	6.61
Cottontail Rabbit	6	5.67
Grey Squirrel	3	2.83
Red Squirrel	3	2.83
Unidentified Mammals	3	2.83
Crayfish	3	2.83
Ruffed Grouse	2	1.89
Unidentified Birds	2	1.89
Ringneck Pheasant	1	0.94
Muskrat	1	0.94
Shrew	1	0.94
Fish	1	0.94
Frog	1	0.94
Salamander	1	0.94
Total	106	100.00



Ted Koehler, Deputy Game Protector of Weatherly, is shown feeding an apple to "Rudolph," the button buck. The injured deer was found by Philip Montz, Weatherly, early in December. Koehler, Montz and Special Fish Warden Fred Woodring improvised a stretcher and carried the injured animal to Koehler's equipment shop where it attracted considerable attention in the Weatherly area.



THE HAND GUN IS A GOOD BET

By ED SHEARER

"DO you know Ed, the average man even in the outdoors is better off with an axe than a six gun. With an axe he can build shelter, build traps to catch game and at close range he is far more certain with an axe." The man speaking was that grand old westerner, the late Chauncey Thomas. We were sitting in my tent at Camp Perry some years ago, down the back trail. Born on the range, he lived through that colorful period of the west when men were popularly supposed to live by the six gun.

Chauncey Thomas was a student of guns and men who used them, most of his life. He was one of the greatest authorities on the old .45 colt peacemaker that ever lived.

"Well," I answered, "I always was lead to believe that most westerners were pretty good pistol shots."

"There were fine rifle shots, yes, but even the best pistol shots couldn't duplicate what you see out there," he replied pointing to the pistol range. "Better guns and ammunition today. Cartridges were expensive with wages thirty dollars a month."

The Old Man has been gone some years now but what he said then is largely true now. In view of the really fine pistols and revolvers on the market today at moderate cost together with cheap ammunition, there are surprisingly few good hand gun shots today. I believe there are more good hand gun shots today than at any time in our history but on the average they're spread pretty thin.

One of the main reasons is that the hand gun is the most difficult of all weapons to learn to shoot well. If one stays with the hand gun long enough to become proficient, it's one of the most fascinating and valuable forms of shooting, that I know of. It's very fine practice for offhand rifle shooting. In fact it is the highest form of offhand shooting. Errors that will land you in the scoring rings of the target with a rifle will net you a clean miss with the hand gun. Moreover, it's the quickest way to discover most of your rifle shooting faults.

Take a target rifle and shoot it from the prone position. You have the sling tight. Your elbows are well braced; your body is well spread out. You can get a sloppy trigger pull or even a slight flinch and you won't notice it too much. Try it offhand and that's something else. If it's not too bad, you'll probably stay in the scoring rings. The long barrel, the weight of the gun and two handed support all tend to slow the effects down till you get the shot away.

Now try the same thing with the hand gun and what happens? You have one hand to control the gun. The short sight radius and light weight of the gun gang up on you. What was a slight error with the rifle will ruin the score with a hand gun. The proof of the pudding is that a good hand gun shot can always shoot a good offhand score with a rifle but I have never seen a rifleman do this with a hand gun. Both with no previous experience with the

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A LESSON IN STEADINESS TO WING AND SHOT

By HERBERT KENDRICK

STEADINESS to wing and shot is one of the real refinements in the great art of handling game and the gun dog so trained has truly become a post graduate in the field. This qualification of bird dog greatness is more often neglected than any other phase of training purely because it is not absolutely essential to the actual bagging of birds.

Of all the tasks the dog is required to perform, steadiness to wing and shot is by far the easiest to teach and the most difficult to maintain. The main reason for the mere simplicity of the teaching lies in the fact that a dog cannot be taught steadiness until he has proven himself to be a staunch reliable pointer. Once his dependability on point has been established, and not before, steadiness to wing and shot is the next step in his progress. Just as it is a tendency in a young dog to flush and chase every game bird he finds, the trained pointing dog possesses the same strong desire to go after the birds flushed by the hunter. He feels certain that if he breaks fast, attains speed, and goes far enough, he will be in the exact locality when the birds alight. This is only sound reasoning of an intelligent animal, and it is the duty of the trainer to teach him it cannot be done, and at the same time share with him an added glory of task well performed. It is an exciting time in the life of both gunner and dog when birds are found and properly handled. In this tense moment when the birds leave the ground and one or more are downed by the guns, it is the inclination of many hunters to rush madly toward the fallen game, which for the moment has become more important than the dog. Thus the dog joins into the confusion, and one of the well mannered fine arts of hunting is destroyed.

The correct method, of course, would be to work calmly up behind the pointing dog, speak softly and encouragingly to him, flush this game, select a possible target, carefully aim and shoot cleanly, then stand in your tracks, mark your game, and after the smoke has cleared, order the dog to break and seek dead. In this calm easy manner, cleaner kills are made, and the dog is made to feel he plays an important role in the *entire* hunting drama.

Now to teach this canine companion to be steady to wing and shot. First, be sure he is positive at pointing, then when he is staunch on point on game, take a long, very strong lead and snap this lead to his collar. Wrap the other end firmly around your hand so that it cannot possibly slip. Walk in and flush the birds, and when they take wing, brace yourself because the dog will tear out after them at full speed. Just before he reaches the end of the lead, command him to "Whoa." He will be too intent on catching a bird to heed your call, but you will be using a signal

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NATURE FACTS AND FALLACIES—from Page 9

semble the human parasites. And "blind as a bat" is one of the least descriptive terms in the English language. Bats are anything but blind, and live on insects caught from the air after the sun goes down when a human being couldn't even see a large moth flying in the air. They do have the weirdest faces, with the exception, perhaps, of the star-nosed mole, in the animal kingdom. They look like the devil, literally.

There is a common belief that many mammals are unable to swim. Persons are sure that a rabbit or a squirrel is certain to drown if it falls in water. So far as we know, all mammals are able to swim. It's true that young rabbits drown in spring rains when in the nest, but an adult rabbit is a fair swimmer when the necessity arises. It can cross a moderate-sized body of water, and a close relative of the cottontail, called the marsh rabbit, lives farther south and spends a large part of its life in water.

As for squirrels, they are good swimmers although they seldom take to the water without some good reason for it. Sometimes, when food becomes scarce, squirrels migrate to a new section. If a river or lake bars their progress, they will swim across it. Two centuries ago there were mass migrations of gray squirrels from the east into what was then the West—the country beyond the Ohio River. In these migrations, thousands of squirrels successfully crossed such big rivers as the Hudson, the Susquehanna, and the Ohio.

Because the eastern flying squirrel is nocturnal in its habits and seldom is seen in the daytime, many persons believe it actually can fly. It can't. It's a glider. A thin membrane stretches from its front to hind legs. When it wants to leap from one tree to another, it springs into the air, extends this thin skin and glides on it to a lower point.

Earlier mention was made of the belief that the call of the mourning dove "means rain." If that were true, it would rain every day early in the summer, because the mournful bell tones of the dove can be heard almost any time in the country. As you know, these birds are often called turtle doves. There is no fallacy connected with this other name for them, but it does reveal a curious double error. The first settlers in this country thought our mourning dove was very much like the European turtle dove, and called them turtle doves. That's one error. The other error was made long ago in Europe in using the word "turtle." Turtles have nothing to do with these doves—but the old Latin name for them was "turtur," which was supposed to sound very much like the soft call they make. Somehow or other, the word "turtur" got into the English language as "turtle." An outstanding example of the mistake is in the English translation of the Bible which refers to the "voice of the turtle" being heard throughout the land. Turtles are nearly voiceless, and what was meant was the "turtur" or "turtle dove," of course.

The raven has long been considered a bird of ill omen, and some persons believe even today that its croaking call heard near a house foretells a death in the home. As we know, this is only superstition, but it is surprising how this belief persists. It is due, no doubt, to the gloomy appearance of the raven and its call, which sounds like it comes from a crow with a cold in its throat. That, and the fact that the raven has figured in many legends, and always as a bird portending disaster in some form. We have some ravens in Pennsylvania, but no especial disasters have been connected with them!

As for crows, they are smart birds, but not nearly so intelligent as one of the fallacies about them would have them be. The crow society is highly organized. They carry out the principle of one for all and all for one much better than most humans. They band together to fight common enemies—and one crow in trouble will bring a whole flock to his aid. They have spotters who watch from high places while the flock eats in a field, and if any enemy approaches, the spotters warn the flock. They have a whole set of calls for different needs which closely approach a spoken language.

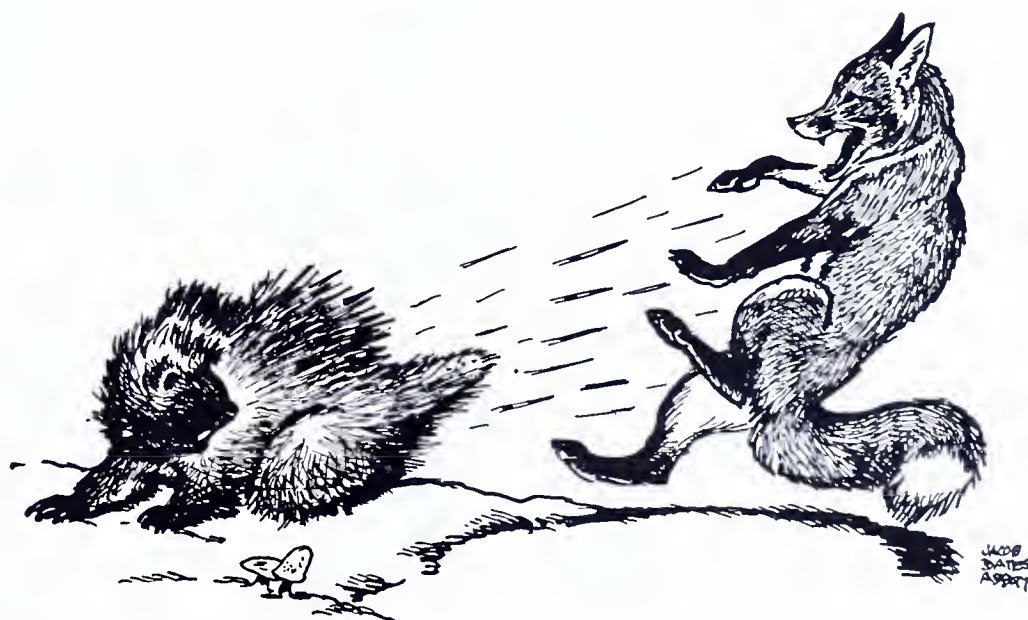
In other words, they are the most human of our birds—but, even so, they aren't capable of the rational thinking credited to them in the fallacious story often circulated about them. Folks who believe such things say that crows sometimes hold formal court trials to try some member who has gotten out of line in crow society. They say the culprit is put in the center of a ring and the surrounding crows conduct a nearly soundless trial, speaking crow language once in a while. If the criminal is convicted, the other crows are said to set upon him and kill him.

There is only a very slight basis of fact in this fallacy. Crows, and other birds as well, sometimes will turn suddenly on a fellow member of the flock and peck it to death. This seems to be involuntary anger at some violation of bird rules rather than

any formal conviction of an offender. One observer said that he saw a number of crows turn suddenly in flight and start dive bombing another member of the flock. The victim finally fell to the earth, and the observer found it quite dead on the ground. Sparrows also will set suddenly upon one of their own kind and subject it to a merciless beating.

There are many wrong beliefs about birds which will have to be reviewed here briefly. For instance, popular opinion considers the eagle—which is seen quite often in Pennsylvania, by the way—as a brave and courageous bird, fiercely determined to catch its own prey. The truth is the eagle is rather lazy and more like a robber baron than a king among birds. It will let other birds, such as the osprey, catch some fish and then steal the catch from the smaller bird. One of the chief fallacies about birds is the speed of their flight in migration. Some wild estimates have been made of this speed, but the fact is that most birds progress at a speed of twenty to fifty miles an hour. That still isn't a slow pace, but it is infinitely slower than the 180 to 240 miles an hour which some persons credit them with! Then there's the idea that crows, ravens and magpies will learn to "talk" much more rapidly if their tongues are split with a knife. This is a cruel fallacy and utterly without foundation in fact. It may have been started because the tongues of these birds are naturally split for a short distance. All can be trained to utter a few words that sound like human speech—without having their tongues split.

Just because a thing is often repeated, it is not necessarily true. That applies to the various fallacies we have discussed here. Be from Missouri, and don't believe everything you hear. Insist on being shown, and thus get outdoors and enjoy Pennsylvania all the more.



NEXT MONTH'S



GAME NEWS

PHIL BARSKE—The value of wet lands in producing fur and feather crops is all too often over-looked or never realized. In this April feature a field representative of the Wildlife Management Institute suggests you take a look at the "wet areas" on your "back forty;" then put those areas to work in giving you some mighty valuable crops.

GEORGE FORREST and HENRY BLATNER—Thar's music in Pennsylvania hills when coon dogs hit the trail. This writer-photographer team brings you a pictorial story on a century-old sport which annually attracts thousands of Pennsylvanians—the coon dog trial. From post time to the tallying-up of scores by the judges, there's action every minute in this great Game News photo-story.

E. STANLEY SMITH—It is a well-known fact among gun stockers that many little, innocent appearing jobs turn out to be tough as squirrel hide, while the most formidable-looking tasks are often comparatively simple. Stock shaping is an excellent example of the latter. In the last installment of the popular artist-writer's introduction to stockmaking, you will find all the information you need to finish up the "sweat and tears" you've been shedding all winter long over your stock bench. Don't miss the fourth of Ned Smith's stockmaking features.

COREY FORD—In one of the best pieces of outdoor writing seen in many a moon, this nationally famed sportsmen and writer reviews the destruction of our natural resources and suggests ways to keep them from "going-going-gone." This reprinted editorial from "Colliers" magazine is a "must" for all of Pennsylvania's outdoorsmen.

NESTING LOSS—from Page 11

the mowing machine. Hay harvesting is done nowadays by mowing equipment mounted on the draw bar of the tractor, or between the front and rear wheels, with the tractor travelling at too high speed for a flushing device to be effective. The problem thus boils down to providing safe nesting cover for the birds to utilize. Cover that will be free from the destructive effects of the mowing machine.

Before considering how to go about supplying this safe nesting habitat, the importance of this practice in the management of the ringnecked pheasant by supplying safe cover to assure nesting success should be understood.

Of the 63 hay field nests studied, 45 nests averaging 11.03 eggs per clutch, which equals 496 eggs were destroyed by mowing machines. Of these 496 eggs, data from the past nesting season reveals that 13.2% of the eggs would not hatch due to infertility or the failure of the egg to hatch although fertile. This leaves a total of 431 eggs that could normally be expected to hatch. *This loss of 431 pheasants is more than double the mortality that was sustained by the pheasants on the study area during the 1948 hunting season and the winter of 1948-49.* Even considering that those pheasants not killed were to re-nest successfully, the loss of nesting effort of the 21 hens that were killed by mowing machines represents a mortality of 201 pheasants when infertility and failure to hatch are computed. This number of pheasants still is equal to the total mortality associated with the past hunting season and winter on the study area.

The pheasant has a remarkable ability to reproduce itself, and a large breeding surplus would be unnecessary if a higher percentage of nest attempts were successful. *Thus it would appear that since pheasants are a crop that should be harvested by sportsmen of this state in the fall, then the aim of pheasant management should be directed toward increasing the success of the nesting attempts, rather than maintaining a large breeding surplus by costly winter feeding, etc.*

One of the brightest hopes for increasing hay field nesting success is found in the nesting habits of pheasants themselves. It was found in the study of nests during the past nesting season, that a marked tendency for locating nests near the edge of the fields was exhibited by the birds of this area. When a nest was located the distance from the nest to the edge of the field was paced by the writer and recorded. Table V presents data on the distance from the edge of fields for 60 nests.

TABLE V

Pheasant Nest Locations with Reference to Distance from Edge of the Field		
Distance from Edge in feet	Number of Nests	Percent of Nests
0-49	25	41.7
50-99	18	30.0
100-149	7	11.7
150-199	5	8.3
200-249	2	3.3
over 250	3	5.0
	60	100.0

Data in Table V show that 71.7% of the nests were located within a 100 foot wide strip around the border of the fields. Thus it is evident that in any attempt to supply safe nesting cover it would be these 100 foot border strips that would furnish the greatest benefit to nesting birds.

The most satisfactory way in which to make these strips of safe nesting cover available to pheasants would be to lease them from farmers having alfalfa and clover fields. The lease would be for the duration of the period in which pheasants would normally be expected to nest, and no cuttings of hay would be made during this time. The farmer would receive payment for the value of the hay he would expect to harvest from the acreage in the strip.

What are the benefits of such a plan? First, it would supply safe nesting areas in which the hen would be most apt to locate her nest. Second, nests located within these strips would be safe from the destruction of the mowing machine regardless of when the first cutting of hay is made. Third, these uncut strips would provide safe and attractive sites for re-nesting by hen pheasants whose first nests were destroyed. Fourth, it would provide safe rearing cover for the hatched broods. Fifth, these strips in which the majority of the hens could normally be expected to nest would greatly reduce the number of hens killed by the mowing machines during the period they are incubating.

No attempt to supply nesting cover in such a manner has ever been attempted to the writer's knowledge, and it is recommended that a study of the benefits derived from such a plan should be carried out before any large scale effort to supply nesting cover is undertaken. Whether better pheasant reproduction from increased nesting success in an area where nesting cover is leased would be sufficient to balance the cost of leasing such strips could only be determined by such a study. The plan does, however, attempt to reduce the large nesting loss associated with hay field nesting, and thus in the writer's estimation would be justified.

STOCKMAKING—from Page 24

ing two holes in the blank with a brace and bit. The first hole is large enough to accommodate the round part of the action bar and the action bar cover. Be sure to bore it deep enough to take care of the latter. The second hole is smaller—a snug fit over the magazine. The barrel channel is then carved out with gouges and scrapers, allowing plenty of clearance for the barrel. The meanest part of this job is locating the holes for the screws that attach the fore-end to the action bar. If you are smart, you'll drill these holes a bit undersize 'til you see if your measurements were correct. While enlarging them later with a round file you can correct any errors in alignment.

BIG BERTHA—from Page 3

positive she was not pursuing us. We did not think she would go far from the cubs. It is the short range, sudden charge of a bear you must watch for. They are as agile as a cat despite their apparent clumsiness, and they can turn like lightning and strike as quickly. I learned later that Bill got some movies of me "shooting" her at the thirty-five foot mark. They were not too bad although the air was so full of falling snow you could hardly see either of us.

That was the last time I saw Bertha and her family until mid-March. I had to return to my headquarters, but Bill kept a watchful eye on her and her family until I could get another photographer on the ground. In the meantime she became more active and moved her little quartet to a thick clump of hemlocks about a hundred yards from her first home. As soon as I reached my office I dispatched Mr. Ralph Cady, an associate, to the outdoor theatre of operations, then spent restless days and sleepless nights wondering how he was making out. I could have saved myself the trouble.

Aside from several days of bad weather, the fact that Bertha moved the youngsters again and had to be relocated, and the tough luck of having a lot of negatives damaged while drying, he eventually returned a week later with some of the most intimate glimpses of bruin's family life I have ever seen. The illustrations accompanying this little narrative offer mute testimony to that accomplishment.

When I saw my associate's exposures I began to realize how tremendous the possibilities were of making a pictorial record of this wilderness episode. Accordingly the two of us went right back to pay Bertha another visit. Believe it or not she had moved again, this time about fifty yards. We figured she must be getting worried or that she didn't like our company. You must remember that up to this time the cubs were still too young to follow her, and she had to carry them one by one by the scruff of the neck until all had been safely transferred.

Bill, the old faithful, helped us find her and we watched the little family for fully five hours, spending nearly all that time taking motion pictures. She was a little more friendly and allowed us to approach to within thirty-five feet. She apparently realized we meant no harm. There was one moment when we weren't sure, however. She wasn't under the hemlocks when we arrived, but the cubs were playing around under the trees. We picked a spot where we had a pretty good view of a big rock on which we figured she would sit, but there was some annoying brush in front of it, so Bill went in to remove it. In the meantime Bertha sneaked up from behind and when some sixth sense made Bill turn, there she stood not more than fifteen feet away. She never moved a muscle and Bill backed away slowly, keeping as far from the cubs as possible. He had no sooner reached us than Bertha ambled up to the cubs, saw that they were all right, then stepped onto the big rock and sat there basking in the sunlight. What a sight!

The cubs were quite lively by now. They would try to climb small saplings and sometimes playfully box with each other. Every now and then Bertha, irritated at one of the youngsters for a misbehavior of some kind, would step off the rock, pick up the offender by the nape of the neck, shake it vigorously, then put it down with an expression which seemed to say, "Now we'll have no more of that sort of thing." Likewise if one wandered too far she would retrieve it and then take up her vigil on the rock again. You could tell that they hadn't been using their little legs much for they were still wobbly. Every now and then one of the little fellows would topple over from sheer top-heaviness.

The last hour and a half she nursed them on a flat moss-covered rock behind the larger boulder. It was a secluded, sylvan spot and made a beautiful picture, except, drat it, she had her back toward us. Unfortunately the little tableau was brought to an untimely end when we tried to maneuver into a better position. Bertha had dozed off with her head on her paw and a cracking twig frightened her so badly that she jumped up leaving four surprised and yawning cubs huddled beneath her.

She stood uncertainly for some time then slowly moved into the brush, the still sleepy youngsters tottering after her on uncertain and somewhat rubbery legs. We did not follow her—in fact we



We watched the little family for more than five hours.

thought we were seeing the last of that wonderful little family. It was a sad and dejected party that retraced its steps homeward that afternoon.

In the days which followed I thought and dreamed about Bertha and her cubs constantly. One day about a week after our return I could restrain myself no longer and telephoned Bill to ask if he had ever seen them again. I could hardly believe my ears when he told me he had seen them the previous Saturday not more than a hundred yards from their last haven. He even dropped the half carcass of a deer nearby to see what Bertha would do. The deer had been killed by an automobile.

Concealed not more than twenty-five feet from her, Bill saw her sit up, sniff, sniff some more, then unerringly go pick up the carcass and carry it into the brush. He observed later that she ate about a pound of the flesh. That same Monday evening he called us to say she was still in the area and next day I dispatched another associate, Mr. Delbert Batchler, to make the acquaintance of Bertha and her four little clowns.

April 9 was made to order for a photographer and it was an enthusiastic party which sallied forth that morning. But although they combed every ridge and peeked into every hemlock stand, the only black objects they encountered were some rotten stumps. Literally, too, they were "stumped." Finally they called a halt and held a little pow-wow. They were about to admit defeat when Bill, unaccustomed to giving up, took a camera and started off by himself. The last Mr. Batchler and Mr. Brown saw of him he was bellying his way into a very dense thicket. Later, as they glanced in that direction, they saw Bill emerge with a big smile on his face, gesturing for them to approach carefully. They needed no second invitation and gradually wormed their way along until they dropped into a little niche near the protector.

There before him, in the center of the thickest hemlock patch, lay Bertha. She had been playing a cagy game and still held four of a kind. They were playing all around her. Some fine pictures were taken of their antics and everything went well until Brown's movie camera developed a shutter screech which sent a chill up the observer's backs. And well it might because Bertha started right for them mad as a hatter, the hair on her back standing straight up. My associate told me later that he would have looked the same way if he had the hair.

Bertha pulled up at about eighteen feet, snorted, licked her chops, chomped, and glared with eyes pink with anger. The watchers almost stopped breathing. Finally she started to retreat. She would take a step then turn and glare at the bothersome intruders; then take another, and so until she was back with her family. Shortly afterwards she decided to lower the curtain finally and took off abruptly through the brush with the cubs trailing in single file, little cripple-foot bringing up the rear as usual. Thus was written finis to a chapter in nature lore which will seldom, if ever, be repeated. To date they have never been seen again.

STEADINESS TO WING AND SHOT—from Page 26

which he will remember in the next second. After you have yelled, "Whoa" he will have reached the end of the lead and if you have established a strong foothold, he will get the shock of his life when he somersaults clear over on his back. This will clearly show him he is not to go after flushed game. Once may not be enough to teach him this important lesson, however, if it is repeated a few times you will be surprised how quickly he learns. If this method fails, use a choke collar. Be sure to compliment him when he performs correctly. An affectionate pat goes a long way with the pupil.

When he has responded to treatment it is a good idea to snap the cord to his collar simply as a safety measure. He will remember that the cord is the instrument that checks him, and he will feel your command over him. The finished performer is well worth the effort required to show him how you want the job done.

A well trained dog should hold on point, stand erectly with head and tail high after the birds have flown and until you command him to move. This is required of dogs in field trials, and should be required of all hunting dogs. Some dogs are trained to drop when game flies, but this method has too many flaws to take time to enumerate them.

When your dog learns to point, the chances are good that he will point game until his last day afield, and if he retrieves, that qualification will stay with him unless something unusual happens

to prevent it, but steadiness to wing and shot is an accomplished feat which will have to be constantly maintained throughout his hunting career. You must be careful in hunting him with other dogs that do not hold to shot. This is a real problem and must be handled with extreme care. It may seem unfair to hold your dog steady while his braced mate goes wildly in and if you are not careful your dog will be there with him. Many men refuse to hunt their dogs with any who are not steady to shot, and if more good men would follow the example, you would see more and more perfectly finished gun dogs in the field.

The excuse a hunter usually gives when his dog is unsteady is that he believes a dog should move in as quickly as possible when game is down in order that cripples may be caught before they get away. However, if a dog is worth his training and possesses a good nose, he will be able to find crippled game just as well even if a few seconds have elapsed between the gun fire and the command to seek dead.

There are dogs that will remain steady at flush and shot if no game falls to the gun, but will go forward before the command to move when they see a bird drop. But the superlative gun dog will not move a muscle even if game is killed and falls fluttering in his sight, until he is ordered on to retrieve. It is an exemplification of fine breeding, sound development, correct training, and beautiful manners if your dog resists the temptation to recover dead game until he is told to do so.

THE HAND GUN IS A GOOD BET—from Page 26

other game. The reason—while both call for the same qualities, the hand gun being more difficult calls for finer co-ordination, holding, sighting and trigger squeezing, to attain the same result.

Another thing that handicaps a number of beginners is that they get started all wrong. They soon get discouraged and give up the game. This is one form of shooting that it is very important to start right. The beginner left to his own devices usually starts out doing every thing wrong, whether it's batting a ball or swinging a golf club. To begin with he'll grab hold of the stock as though he had his worst enemy by the neck. Another common fault of the beginner is aiming the gun with a bent arm accompanied by a tense stance. This sets up a chain of muscular reactions and tremors, that not only make the sights jump all over the landscape but is exceedingly tiring to the shooter. He will also slip his index finger through the trigger guard letting the trigger rest on the first joint. This will work out in rifle shooting where you have a two handed hold and heavier arm. But here, getting the shot away is achieved by squeezing the whole hand. With the hand gun you must learn to hold the gun in the hand and do your squeezing with the trigger finger only. Also if the finger is too far through the guard part of the pressure is exerted against the guard itself, thereby tending deflect the gun from the line of sight.

Having now gone into some of the things not to do, let us now go into some of the obstacles and how to overcome them, as the beginner usually sees it. The first thing that discourages the novice is the excessive wobble and bobble of the front sight. He instinctively tightens up trying to hold it down and it jumps around worse than ever.

Right here we learn the great fundamental of all shooting—relax. Let your self go slack and throw tenseness out the window. Right away you notice the motion of the front sight is not so violent. True there is plenty of motion and we might as well realize at this stage there will always be some motion to any gun that is held in human hands.

This steady as a rock and human machine rest we hear so much about, are only produced in western stories and Hollywood. Just as there is always some sight movement there is also a wide range of wobble, from very much to hardly perceptible. Even a bench rest and sand bags will give you some movement. Anyone doubting this can easily verify it. Metallic sights under these conditions give no perceptible movement to the eye. Now put a high power telescopic sight on the gun and you will quickly perceive the motion.

What you can do is to develop the muscles in the hand, forearm

and shoulder to point where in coordination with eye and trigger finger, the motion is slowed down sufficiently to get away an effective shot. This under ordinary conditions. The amount of this motion depends on the amount of practice the shooter devotes to it. There can be no machine rest rigidly as long as the human factor is the controlling factor.

Excitement, untrained muscles, excessive smoking or drinking or poor physical condition in general add their full share to unsteady holding. Now that we know what causes the wobbles and how to lick them, we are ready for the next step. That is the proper grip (a better word is proper hold) of the hand gun. Here we are faced with two choices. Which method depends on whether we are interested in slow fire accurate shooting, really fast double action work or shooting at moving or flying targets. As the beginner must first learn to do reasonably good shooting in slow fire before he can hope to succeed at fast work, we will stick to the slow fire. Here the high hold is used. In this method the butt rests well in the palm of the hand. The index finger is laid along the side of the frame, with the tip on the trigger. The thumb is extended along the frame on the opposite side. The thumb's function is to help to steady the gun and counteract any disturbing force, such as the trigger squeeze, etc. The stock rests lightly in the palm of the hand with slight tension. At one time in exhibition shooting I demonstrated this shooting a .44 S&W Special with thumb and index finger holding and firing the gun and breaking stationary clay targets at 15 yards.

Now that you have the hold down the next thing to learn is to align the gun correctly. The arm should be raised at arms length in a straight line and the gun should be a prolongation of the arm. The arm should never be bent. The arm, gun sights, and target should always represent a straight line.

In facing the target the feet should be placed far enough apart to obtain good balance, with weight evenly distributed. As to the rest you can face the target at about a 45 degree angle or continue the straight line through both shoulders, which ever is the most comfortable. It helps balance to rest one hand on your hip or to stick it in your pocket. There are no hard and fast rules as long as they afford comfort and balance. Without these two essentials you will never attain that relaxation that is paramount to success with the hand gun.

Now that we have covered the fundamentals, next month we will look at the obstacles that plague the beginner when he starts firing the hand gun.

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of December, 1949

ADAMS—\$145

Bange, Raymond E., R. D. No. 4, Hanover. Hunting rabbits between 5 P.M. and 7 A.M.	\$15.00
Bange, R. Norman, R. D. No. 4, Hanover. Hunting rabbits between 5 P.M. and 7 A.M.	15.00
Ginter, Charles W., 14 High St., Hanover. Having loaded shotgun in car standing on highway	10.00
Keefer, Donald E., 166 York St., Gettysburg. Attempting to kill pheasant hen	25.00
Little, Paul W., 200 Steinweher Ave., Gettysburg. Having loaded rifle in car standing along highway	10.00
McIntyre, Grayson G., 57 Main St., McSherrystown. Possessing loaded rifle in vehicle standing on highway	10.00
Noel, James A., Rt. 5, Gettysburg. Possessing loaded rifle in car standing on highway	10.00
Peck, Amos A., R. D. No. 2, New Oxford. Loaded shotgun in car standing on highway	10.00
Rickrode, Emory B., Littlestown, R. D. Possessing loaded shotgun in car standing along highway	10.00
Sterner, Robert P., R. D. No. 4, Hanover. Possessing loaded rifle in vehicle standing on highway	10.00
Straley, Robert A., R. D. No. 1, Littlestown. Possessing loaded shotgun in vehicle standing on highway	10.00
Weygandt, James E., 157 N. Stratton St., Gettysburg. Having loaded rifle in car standing along highway	10.00

ALLEGHENY—\$1345

Anderson, Robert E. R. D. No. 2, Box 14A, Pitcairn. Hunting without resident license	20.00
Barrett, Thomas A., 4917 Lytle St., Pittsburgh. Hunting without resident license	20.00
Barto, Louis, Russellton. Shooting across highway while hunting game	25.00
Biernesser, Herbert A., R. D. No. 1, Glenshaw. Hunting without resident license	20.00
Breakiron, William C., 1119 N. St. Clair St., Pittsburgh. Possessing loaded rifle in vehicle standing on highway	10.00
Bush, Ellis G., 5623 Roman St., Pittsburgh. Possessing loaded rifle in vehicle standing along highway	10.00
Delack, Tony, 741 N. Mathilda St., Pittsburgh 24. Shooting within 150 yds. of occupied building	25.00
Eyrolles, Alfred M., 34 S. Park Village Broughton. Attempting to take mink by means of trap in closed season; failure to tag one trap	20.00
Evans, Blair S., Box 15, Bruceton. Transporting parts of deer untagged	125.00
Ferguson, Regis C., 6922 Churchland St., Pittsburgh. Possessing loaded rifle in vehicle standing along highway	10.00
Formichella, Emeric E., 278 Mt. Vernon Drive, Pittsburgh. Possessing male deer taken in closed season	100.00
Fries, George F., 387 Woodcliffe Circle, Pittsburgh 16. Lending hunting license to another	20.00
Fritz, Eugene J., Wildwood P. O. Taking muskrat in closed season	10.00
Gibson, John F., R. D. No. 3, Elizabeth. Possessing male deer not having 2 or more points to one antler	100.00
Gottschalk, Albert W., 5106 Lotus Way, Arsenal Sts., Pittsburgh. Hunting without resident license	20.00
Hardt, Perry E., Mt. Royal Blvd., Allison Park. Taking muskrat in closed season	10.00
Jamison, Edward A., 219 N. Graham St., Pittsburgh. Shooting at an unprotected target in big game season	10.00
Johnson, Arthur E., 1815 Ridge St., Pittsburgh. Shooting within 150 yds. of occupied building	25.00
Johnson, D. N., 4743 Norma Drive, Pittsburgh 27. Failure to tag one trap	10.00
Kaltenback, Walter C., Renfrew. Kindling fire on state game lands	25.00
Kaufman, Elmer F., Renfrew. Kindling fire on state game lands	25.00
King, Donald E., 1044 Pacific Ave., Bracken Ridge. Failure to post camp roster as required	25.00
Kuhn, H., 1235 Resaca Place, Pittsburgh 12. Shooting at unprotected target in big game season	10.00
Markovich, Edward, 600 Liberty Way, McKeesport. Possessing loaded rifle in vehicle used as a blind to kill game	25.00
Marts, Dean F., 1153 Park St., E. McKeesport. Shooting at unprotected target in big game season	10.00
Matesic, John, 4846 Blackberry Way, Pittsburgh. Failure to maintain roster	25.00
McCloskey, Walter W., 1047 Penn Ave., Pitcairn. Participating in killing deer in closed season	100.00
Mura, Jos. R., 1160 Resica St., Wilkinsburg. Removing deer from place killed without first tagging	10.00
Pison, Jr., John, 5420 Sunnyside St., Pittsburgh 7. Shooting at target more than 200 yards from camp	10.00
Pizzutelli, Charles, 724 Railroad St., Monongahela. Possessing loaded rifle in vehicle standing on highway	10.00
Rexford, Theodore L., R. D. No. 1, Burtner Rd., Tarentum. Shooting at unprotected target in big game season	10.00
Rook, Donald W., R. D. No. 1, Turtle Creek. Hunting without resident hunting license	20.00
Sago, John, 1814 Charles St., Pittsburgh. Failure to produce roster	25.00
Sandy, Daniel L., 106 R. R. Ave., Homer City. Failure to maintain proper roster	25.00
Sesti, Louis J., R. D. No. 2, Reynoldsville. Hunting in safety zone	25.00
Sesti, Peter, R. D. No. 2, Reynoldsville. Hunting in safety zone	25.00
Settemoyer, Wm. E., 1112 Island Ave., McKees Rocks. Possessing loaded rifle in vehicle in motion on highway	25.00
Sheffy, Samuel, Backeris Hotel, E. Pittsburgh. Hunting on special dog training area	25.00
Sinesky, Albert R., 138 Maple St., Coverdale. Attempting to take muskrat by means of traps in closed season	10.00
Soedalar, Angelo, 903 Saint Ann St., Castle Shannon. Possessing antlerless deer unlawfully taken	100.00

Stoats, Walter H., 616 Second St., Pitcairn. Transporting parts of big game	25.00
Vernon, Joseph A., 519 Fairywood, Crafton, Pittsburgh. Possessing loaded rifle in vehicle standing along highway	10.00
Wagner, Donald E., 47 Willow St., Glenshaw. Shooting at unprotected target in big game season	10.00
Wagner, Ralph, R. D. No. 1, Elizabeth. Killing deer while taking refuge	100.00
Wandel, Bruce B., 96 S. Bryant St., Pittsburgh. Shooting within 150 yds. of occupied buildings	25.00
Wolfgang, Harold E., Douglass Ave., Elizabeth. Possessing loaded rifle in vehicle standing along highway	10.00
Yeagle, Lloyd L., R. D. No. 1, Gibsonia. Possessing skin of muskrat unlawfully taken	10.00

ARMSTRONG—\$770

Atherton, Kelly S., R. D. No. 1, Templeton. Hunting without resident license	20.00
Beranty, Andy, Yatesboro. Transporting untagged deer	25.00
Bowser, Daniel L., R. D. No. 4, Kittanning. Hunting without resident license	20.00
Burdett, Fred H., 1204 6th Ave., Ford City. Failure to tag one trap	10.00
Cunningham, William E., Manorville. Possessing skin of muskrat unlawfully killed	10.00
Good, James M., Manorville. Possessing skin of muskrat unlawfully killed	10.00
Lavosky, John, Rural Valley. Transporting parts of big game unmarked	25.00
Schrecengost, Fred J., R. D. No. 1, Dayton. Possessing wild turkey taken in close season	25.00
Stokes, J., Lee, R. D. No. 1, Freeport. Shooting within 150 yds. of occupied building	25.00
Troup, Jr., Chas. E., 642 Thirteenth St., Sagamore. Possessing bear less than 1 year old	200.00
Troup, Carl E., 646 Thirteenth St., Sagamore. Possessing bear less than 1 year old	200.00
Troup, S. L., 498 3rd St., Sagamore. Possessing bear less than 1 year old	200.00

BEAVER—\$125

Kronket, Steven J., R. D. No. 1, Freedom. Hunting without resident license	20.00
McCoy, Jr., Charles W., 4 F-Van Buren Homes, Beaver. Failure to tag trap	10.00
McCoy, Sr., Charles W., 4 F-Van Buren Homes, Beaver. Failure to tag trap	10.00
McDade, Harry R., Box 445, Midland. Hunting without resident license	20.00
Proctor, Robert A., R. D. No. 8, New Brighton. Transporting parts of big game unmarked	25.00
Sassic, Stanley, Harveys Run Rd., R. D. No. 1, Freedom. Hunting without resident license	20.00
Stanford, Fred W., R. D. No. 1, Monaca. Failure to display license tag while hunting	20.00

BEDFORD—\$1265

Ackerman, Henry, R. D. No. 1, Schellsburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Auman, Ernest A., R. D., Hopewell. Failure to tag trap	10.00
Baker, Elmer C., Loysburg. Assisting to kill deer within closed season	100.00
Baker, James E., New Enterprise. Assisting to kill deer with visible antlers in closed season	100.00
Barnes, Richard G., R. D. No. 1, Artemas. Killing doe deer in closed season	100.00
Clingerman, Earl, Artemas. Assisting to conceal game unlawfully killed	100.00
Corle, Emil D., Imler, R. D. No. 1. Killing doe deer in closed season; hunting without a resident license	120.00
Fix, Elmer H., Six Mile Run. Failure to maintain complete roster of party hunting big game	10.00
Guyer, Harry R., New Enterprise. Assisting to kill deer in closed season	100.00
Imler, Jas. H., New Enterprise. Assisting to kill deer with visible antlers in closed season	100.00
Kennell, Richard L., R. D. No. 1, Hyndman. Possessing loaded rifle in vehicle in motion on highway	25.00
Kifer, Clay E., R. D. No. 1, Artemas. Assisting to conceal game unlawfully killed	100.00
Minick, Richard, R. D., Six Mile Run. Assisting to transport deer unlawfully killed	100.00
Northcraft, Ivan, Artemas. Interfering with state officer in performance of duty	100.00
Parson, James R., R. D. No. 1, Enterprise. Failure to tag deer one hour after kill	10.00
Pearson, James R., R. D. No. 1, New Enterprise. Failure to tag deer one hour after kill	10.00
Rogers, Edgar C., Defiance. Possessing shotgun in vehicle in motion on highway	25.00
Showalter, Dewey H., R. D. No. 1, Everett. Possessing loaded rifle in car standing on highway	10.00
Whyson, Vernon C., R. D. No. 1, Imler. Hunting without resident license; concealing doe deer unlawfully killed	120.00

BERKS—\$3350

Angstadt, Charles Z., 243 Whiteoak St., Kutztown. Assisting to conceal deer unlawfully killed	100.00
Berger, Oliver F., Star Route, Hamburg. Killing doe deer in closed season	100.00

Berk, Robert C., 1336 Muhlenberg St., Reading. Transporting parts of big game unmarked	25.00
Berlitz, Fred W., 216 E. Penn Ave., Robesonia. Possessing loaded rifle in vehicle standing along highway	10.00
Bernhart, Calvin, Jr., R. D. No. 1, Boyertown. Shooting at random during big game season	10.00
Bickel, Harold D., R. D. No. 2, Box 33, Sinking Springs. Failure to tag one trap	10.00
Biddlecombe, Charles E., Berkshire Heights. Transporting parts of big game unmarked	25.00
Bieber, Abner Rapp, Oley. Transporting parts of big game unmarked	25.00
Boyer, Harland L., 103 N. Stirley St., Shillington. Transporting illegally killed 10 point buck	100.00
Care, Alvin L., R. D. No. 2, Birdsboro. Failure to produce roster of party hunting big game	25.00
Carroll, Robert F., 403 S. 6th St., Reading. Transporting an illegally killed 5 point buck	100.00
Cass, William S., 343 S. Seventh St., Reading. Hunting with firearm, not properly accompanied when under 16 years of age	20.00
Davidson, Charles A., R. D. No. 1, Temple. Hunting game on state game propagation area	25.00
Dellicker, Willard C., Tipton. Using motor vehicle to transport deer illegally killed	100.00
Diefolf, Forest B., R. D. No. 1, Oley. Shooting at random in big game season	10.00
Fenstermacher, Harold M., 44 Weiss St., Tipton. Assisting to conceal game unlawfully killed	100.00
Freeman, Leroy E., 417 W. Windsor St., Reading. Failure to produce roster	25.00
Fritz, Harold D., 941 Pike St., Reading. Possessing loaded rifle in vehicle standing along highway	10.00
Fritz Martin L., 941 Pike St., Reading. Possessing loaded shotgun in vehicle standing along highway	10.00
Geist, Clyde R., R. D. No. 1, Mertztown. Failure to tag trap	10.00
Gresh, Ralph, 147 Penn St., Reading. Possessing loaded rifle in vehicle in motion on highway	25.00
Grim, Alfred G., Bowers. Assisting to conceal game unlawfully killed	100.00
Grim, David D., Bowers. Killing male deer in closed season	100.00
Henninger, Charles I., Strausstown. Possessing one wild turkey over limit	25.00
Hilbert, Willard W., Tipton. Assisting to conceal game unlawfully killed	100.00
Hilbert, William D., Penn St., Tipton. Assisting to conceal deer unlawfully killed	100.00
Hoffman, Fred, 531 Main St., Birdsboro. Failure to produce roster of party hunting big game	25.00
Hoppes, Daniel G., Hamburg, R. D. No. 1. Transporting parts of big game unmarked	25.00
Kissinger, Clayton A., R. D. No. 1, Mohnton. Failure to produce roster of party hunting big game	25.00
Kline, Charles H., Star Route, Shartlesville. Killing doe deer in closed season	100.00
Kocher, Donald E., 627 N. 10th St., Reading. Shooting at unprotected target in big game season	10.00
Kohl, Charles M., R. D. No. 2, Elverson. Failure to produce roster of party hunting big game	25.00
Krepps, Clarence A., R. D. No. 2, Douglasville. Killing doe deer in closed season; Transporting deer unlawfully taken	200.00
Lichtenstein, Morris E., 1145 Walnut St., Reading. Buying skin of fur-bearing animal in closed season	50.00
Mabry, R. Emory, R. D. No. 1, Mertztown. Assisting to conceal deer unlawfully killed	100.00
Master, Karl W., 146 W. Main St., Kutztown. Assisting to conceal game unlawfully taken	100.00
Miller, Raymond K., 1414 Cotton St., Reading. Possessing loaded rifle in vehicle standing along highway	10.00
Moser, William J., 106 Newport Ave., Reading. Killing 10 point buck in closed season	100.00
Moyer, William B., R. D. No. 1, Boyertown. Killing male deer not having 2 points to one antler	100.00
Ney, Paul D., 513 Cedar St., Reading. Transporting parts of big game untagged	25.00
Nicholas, Benjamin A., 419 Miner St., Reading. Killing deer in closed season	100.00
Novik, Michael, R. D. No. 1, Reading. Assisting to conceal illegally killed deer	100.00
Phile, William H., 108 N. Front St., Reading. Shooting across highway while hunting game	25.00
Reber, Melvin F., R. D. No. 2, Box 534, Reading. Possessing skins of six muskrats unlawfully taken	60.00
Reed, Albert S., R. D. No. 1, Douglasville. Transporting parts of big game unmarked	25.00
Reppert, Earl M., R. D. No. 2, Hamburg. Transporting parts of big game unmarked	25.00
Sailer, Harold G., R. D. No. 1, Temple. Transporting parts of big game unmarked	25.00
Schoedler, Jr., Harry H., R. D. No. 1, Mertztown. Killing male deer in closed season	100.00
Sheirich, Mrs. Mary H., 819 N. 2nd St., Reading. Hunting without resident license	20.00
Smith, Charles, Box 80, Lyons Station. Shooting at random in big game season	20.00
Souchick, Moxie, 137 S. Mill St., Birdsboro. Possessing parts of deer more than 60 days after close of season	50.00
Sparr, Thomas M., R. D. No. 2, Elverson. Hunting game between 5 P.M. & 7 A.M.	15.00
Stainecker, John K., 119 Mulberry St., Reading. Shooting at unprotected target in big game season	10.00
Stamm, James H., Box 138, Leesport. Possessing loaded rifle in vehicle standing along highway	10.00
Stauffer, Lloyd, R. D. No. 2, Douglasville. Possessing two rabbits over limit	20.00
Stetzler, Guy D., R. D. 2, Hamburg. Attempting to kill deer in closed season	100.00
Stoyer, William H., 749 N. 11th St., Reading. Possessing loaded rifle in vehicle standing along highway	10.00
Strauss, Oscar D., Strausstown. Possessing parts of deer unlawfully taken	100.00
Sychterz, Stanley J., 416 S. 19th St., Reading. Hunting on borrowed license; Hunting without resident license; Attempting to kill second deer in one season	140.00
Ulrich, Floyd V., 1532 Haak St., Reading. Shooting at unprotected target in big game season	10.00

Wagner, Claude W., 636 Angelica St., Reading. Lending hunting license to another	20.00
Wagner, Ralph C., 48 N. Second St., Hamburg. Transporting parts of big game unmarked	25.00
Wann, Abel H., R. D. No. 1, Womelsdorf. Taking four muskrats in close season	40.00
Warden, Thomas E., Main St., Birdsboro. Possessing loaded rifle in vehicle in motion on highway	25.00
Weaknecht, George E., 231 Home St., Tipton. Failure to produce roster	25.00
Winkers, Edwin H., 812 Holland Sq., Wyomissing. Transporting parts of big game unmarked	25.00
Yoder, Guy W., R. D. No. 1, Hamburg. Transporting parts of big game unmarked	25.00
Zerbe, Frederick, 134 Walnut St., Mohnton. Transporting parts of big game unmarked	25.00

BLAIR—\$385

Heverly, Elmer W., R. D. No. 1, Martinsburg. Possessing 4 muskrats in close season and 5 traps not tagged	90.00
Kephart, Merrill T., 106 Jones St., Hollidaysburg. Transporting parts of big game unmarked	25.00
Long, Frank R., R. D. No. 2, Box 373, Tyrone. Possessing spike deer in close season	100.00
McCloskey, Addie M., R. D. No. 2, Box 103, Altoona. Possessing loaded rifle in vehicle not in motion	10.00
Montgomery, Aldine R., Duncansville R. D. Possessing loaded rifle in vehicle in motion on highway	25.00
Montgomery, Thos. G., Duncansville. Possessing loaded rifle in vehicle in motion on highway	25.00
Reinschmidt, Robt. N., Hillside Court, Tyrone. Possessing loaded rifle in vehicle in motion on highway	25.00
Rhodes, Wilmer B., 533 E. Main St., Roaring Spring. Transporting deer not properly tagged	25.00
Rutherford, Norman L., 202½ Montgomery St., Hollidaysburg. Hunting on special dog training area	25.00
Smith, Reuben J., R. D. No. 1, East Freedom. Possessing loaded rifle in vehicle in motion on highway	25.00
Stewart, Melvin C., R. D. No. 1, Duncansville. Possessing loaded rifle in vehicle standing along highway	10.00

BRADFORD—\$335

Arnold, Walter 121 Hoover St., Sayre. Hunting without resident license	20.00
Baumgardner, Frank H., Wysox. Possessing loaded rifle in vehicle moving on highway	25.00
Beeman, Leroy H., R. D. No. 1, Leraysville. Possessing male deer taken in close season	100.00
Bidlack, Gordon B., R. D. No. 1, Rome. Possessing loaded rifle in vehicle standing along highway	10.00
Bryington, Joseph W., R. D. No. 1, Canton. Possessing loaded rifle in auto while standing along highway	10.00
D'Augustine, John L., Birdsboro, R. D. No. 1. Shooting within 150 yds. of occupied building	25.00
DuPois, Gordon A., 117 North St., Athens. Possessing loaded rifle in vehicle moving on highway	25.00
Melody, Charles H., R. D., Leraysville. Possessing loaded rifle in vehicle moving on highway	25.00
Phelps, Henry W., 36 Keystone Ave., S. Waverly. Possessing loaded rifle in vehicle while in motion	25.00
Rinebold, Lewis H., 230 Maple St., Athens. Possessing loaded rifle in moving car	25.00
Shaffer, Irvin L., R. D. No. 6, Towanda. Possessing loaded firearm in vehicle standing on highway	10.00
Tiffany, Frank L., 230 Maple St., Athens. Possessing loaded firearm in moving vehicle on highway	25.00
Vanderpool, Carl H., R. D. No. 3, Wyalusing. Failure to visit traps within 36 hours	10.00

BUCKS—\$375

Bell, Clarence L., 6 Luther St., Hatboro. Hunting without resident license	20.00
Bryan, Floyd S., R. D. No. 1, Doylestown. Transporting untagged deer	25.00
Clardy, George H., Tinicum. Possessing loaded rifle in car in motion on highway	25.00
Dorn, Allen H., R. D. No. 1, Telford. Shooting at rabbit on highway; Shooting within 150 yds. of occupied building	50.00
Holland, Herman D., Springtown. Possessing loaded rifle in vehicle in motion on highway	25.00
Houseworth, Irvin R., Upper Black Eddy. Possessing loaded rifle in vehicle in motion on highway	25.00
Laubach, Walter E., R. D. No. 1, Riegelsville. Possessing loaded rifle in vehicle in motion on highway	25.00
Lindemuth, Donald L., 32 Holt Terrace, Lacey Park, Hatboro. Transporting parts of big game unmarked	25.00
Myers, Norman S., Blooming Glen. Killing second deer in one season	100.00
Neff, Harry G., R. D. No. 1, New Hope. Shooting at random in big game season	10.00
Pfeiffer, William E., Gardenville. Staking out and setting 2 traps for furbearer prior to opening hour	20.00
Richardson, Elwood, R. D. No. 1, Bristle. Possessing loaded rifle in vehicle in motion on highway	25.00
Ronaldo, Charles E., Yardley. Shooting at unprotected target in big game season	10.00

BUTLER—\$75.00

Andrews, Edward L., R. D. No. 3, Slippery Rock. Possessing loaded rifle in vehicle standing along highway	10.00
Judson, Jr., Clarence D., R. D. No. 5, Butler. Possessing loaded rifle in vehicle standing along highway	10.00
Kriebel, Homer, R. D. No. 3, Butler. Shooting at unprotected target in big game season	10.00
Mershimer, Chas. K., R. D. No. 4, Slippery Rock. Possessing loaded rifle in vehicle standing along highway	10.00
Rodgers, Richard A., 215 Spring St., Butler. Possessing loaded rifle in vehicle standing along highway	10.00
Tomosovich, Steve, Campbell Ave., Lyndora. Shooting within 150 yds. of building	25.00

CARBON—\$290

Andrews, Clayton, 277 Bankway, Lehighon. Shooting at random in big game season	10.00
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George, Allen L., R. D. No. 1, Kunkletown. Transporting an unlawfully killed deer; Possessing vension unlawfully taken	100.00 & 100 days
Kern, Claude, 36 S. 2nd St., Lehighon. Failure to produce roster of party hunting big game	25.00
Kleckner, Arthur G., R. D. No. 2, Lehighon. Shooting at random in big game season	10.00
Miller, Harvey P., 600 N. 1st St., Lehighon. Shooting at random in big game season	10.00
Quinn, Donald A., Box 29, Ashfield. Transporting untagged deer	25.00
Recker, Jr., Joseph F., R. D. No. 1, Palmerton. Possessing loaded shotgun in vehicle standing along highway	10.00
Smith, David, 796 Princeton St., Palmerton. Killing doe deer in close season	100.00

CAMBRIA—\$1370

Bodenshatz, Edward J., R. D. No. 1, Portage. Shooting across highway while hunting game	25.00
Burkhardt, Paul G., 201 Dishong Rd., Johnstown. Possessing 2 antlerless deer unlawfully taken; Hunting game on Sunday	225.00
Chaplain, Mrs. Freda E., Box 92, R. D. No. 3, Johnstown. Transporting untagged game	25.00
Costanzo, Arthur E., 2859 Bedford Ave., Johnstown. Killing pheasant hen	25.00
Davis, Richard E., 121-4th Ave., Conemaugh. Possessing loaded rifle in vehicle standing along highway	10.00
Gelles, Paul, 227 Main St., Conemaugh. Attempting to kill wild turkey in close season	25.00
Giles, Joseph, 208 Maple St., South Fork. Shooting upon lands of park	25.00
Gimerick, John J., Colver. Shooting across highway while hunting game	25.00
Gustafson, Harold F., Fallen Timber. Participating in the killing of deer in close season	100.00
Hahl, Harvey, R. D. No. 2, Ebensburg. Hunting deer between the hours of 5 P.M. & 7 A.M.	15.00
Howard, Donald 263 Ohio St., Johnstown. Possessing loaded rifle on vehicle standing along highway	10.00
Johnsola, Samuel, 221 Ebensburg Road, Johnstown. Possessing loaded rifle in vehicle standing along highway	10.00
Jorkos, George L., Route 1, Box 284, Johnstown. Possessing an antlerless deer unlawfully taken; Assisting to transport deer unlawfully taken	200.00
Kolar, William J., 100 Hebron St., Johnstown. Shooting upon lands of park	25.00
Korcil, Anthony B., 200 Main St., Conemaugh. Possessing loaded gun in vehicle standing along highway	10.00
Miller, Earl L., R. D. No. 5, c/o Mrs. Coates, Greensburg. Possessing doe deer illegally taken	100.00
Paserba, Steve, Rear 227 Main St., Conemaugh. Attempting to kill wild turkey in closed season	25.00
Petruska, Andrew E., 606 Chestnut St., Johnstown. Possessing loaded rifle in vehicle standing along highway	10.00
Pokraki, John T., R. D. No. 1, Mt. Pleasant. Possessing skins of three muskrats unlawfully taken	30.00
Prengaman, Gerald L., 24 Franklin Ave., N. Irwin. Taking 3 muskrats in close season	30.00
Robson, Clarence A., R. D. No. 55 Dupont Place, Johnstown. Hunting wild animals in safety zone	25.00
Roebuck, Warren C., R. D. No. 1, West Newton. Taking two muskrats in close season	20.00
Shilling, Andrew E., R. D. No. 2, Ebensburg. Hunting on state game propagation area	25.00
Shuster, Leon W., R. D. No. 2, Leechburg. Using automobile to hunt for game	50.00
Skarrs, Stanley, 925.2nd Ave., New Kensington. Shooting within 150 yds. of occupied building	25.00
Slagle, Charles C., 425 Longfellow St., Vandergrift. Failure to visit trap within 36 hours	10.00
Snyder, Franklin M., R. D. No. 3, Mt. Pleasant. Taking one rabbit in closed season	10.00
Snyder, Jr., William, 1215 Victoria Ave., New Kensington. Shooting across highway while hunting game	25.00
Swede, Walter, R. D. No. 1, Box 285, Johnstown. Hunting wild animals in safety zone	25.00
Symosky, Peter, Box 226, Elmora. Hunting in state game propagation area	25.00
Thomas, Lawrence R., R. D. No. 2, Box 294, Pitcairn. Hunting without resident license	20.00
Toohey, Albert R., Fallen Timber. Participating in killing deer in close season	100.00
Wike, Duane Roy, Belsano. Hunting deer between 5 P.M. & 7 A.M.	15.00
Wineberg, Merle A., Irwin. Transporting large game untagged	25.00
Zupanc, Frank J., R. D. No. 1, Box 65, West Newton. Aiding in securing license for person not entitled to same	20.00

CAMERON—\$125

Manginell, Leo, R. D. No. 1, Emporium. Attempting to kill second deer in one season	100.00
Swanson, Alvin L., R. D. No. 1, Emporium. Possessing loaded rifle in vehicle in motion	25.00

CENTRE—\$640

Bell, Seth, Gen. Del. Philipsburg. Hunting while hunting rights have been denied	40.00
Bruss, John H., Fleming. Possessing loaded rifle in vehicle in motion on highway	25.00
Coder, Ronald G., 440 E. High St., Bellefonte. Shooting at unprotected target in big game season	10.00
Cowher, Ralph C., R. D. No. 1, Port Matilda. Possessing spike buck deer in close season	100.00
Gartner, Jack, 3041 N. Oriana St., Philadelphia. Possessing loaded rifle in vehicle standing along highway	10.00
Grove, Paul W., R. D. No. 3, Bellefonte. Killing doe deer in closed season	100.00
Holderman, Robert R., State College. Failure to tag deer within 1 hour after killing; Kindling fire on state game lands; Resisting arrest	135.00
Miller, Blanche H., Howard R. D. Transporting male deer not properly tagged	25.00
Stillman, Sam W., P. O., Box 539, State College. Cutting trees on state game land	25.00

Swank, W. A., 522 W. Beaver Ave., State College. Possessing loaded rifle in vehicle in motion on highway	25.00
Walk, Dale C., R. D. No. 1, Port Matilda. Making false statement to secure license	20.00
Walters, Norman D., R. D. No. 3, Bellefonte. Assisting in killing deer in closed season	100.00
Yon Lunen, Roger R., P. O. Box 539, State College. Cutting trees on state game land	25.00

CHESTER—\$1090

Alleva, Dominic J., Devault. Attempting to kill one deer over season limit	100.00
Baylor, Charles A., R. D. No. 4, Pottstown. Transporting parts of big game unmarked	25.00
Bernard, Clarence M., R. D. No. 1, Honeybrook. Attempting to kill deer in one season	100.00
Buckwalter, Ray L., R. D. No. 1, Pottstown. Assisting in concealing deer unlawfully taken	100.00
Ciuffetelli, Bernard, 3415 S. Union St., Kennett Square. Killing one wild turkey in closed season	25.00
Colletta, Frank J., 401 W. Third St., Chester. Possessing loaded rifle in vehicle standing along highway	10.00
Combs, John W., Honeybrook. Taking one muskrat in closed season	10.00
Cookman, Jr., Rodney P., R. D. No. 1, Malvern. Possessing loaded rifle in vehicle standing along highway	10.00
Cramer, Lester C., R. D. No. 3, West Chester. Possessing loaded rifle in vehicle standing along highway	10.00
DiRenzo, Anthony, 26 Waterloo Rd., Devon. Taking 10 muskrats in closed season	100.00
Downes, James E., 424, Price St., West Chester. Hunting on special wildlife refuge	25.00
Emery, Charles P., 222 Stuart Ave., Downingtown. Killing and possessing male deer with antlers, unlawfully taken in closed season	100.00
Faucett, Nathan Y., R. D. No. 5, West Chester. Possessing 5 muskrat hides in close season	50.00
Groff, Robert P., 148 Fourth Ave., Phoenixville. Transporting parts of big game unmarked	25.00
Grubb, Charles F., 307 Pikeland St., Spring City. Setting steel trap closer than 5 feet from hole	10.00
Kinsey, Thomas W., 236 N. Broad St., Kennett Square. Transporting parts of big game unmarked	25.00
Matlack, Jr., E. L., R. D. No. 2, Downingtown. Hunting without resident license	20.00
Miller, William B., R. D. No. 2, Coatesville. Hunting without resident license	20.00
Norcini, Samuel J., Berkley Rd., Devon. Transporting deer not properly tagged	25.00
Singer, Lewis U., 29 East Gay St., West Chester. Possessing loaded rifle in vehicle standing along highway	10.00
Stalneck, Byron D., 506 S. Main St., Spring City. Possessing loaded rifle in vehicle standing along highway	10.00
Thomson, Albert F., Avondale. Transporting parts of big game untagged	25.00
Toulson, Caleb S., R. D. No. 2, Kennett Square. Killing buck deer in close season; Transporting an illegally killed buck	200.00
Trego, Samuel A., R. D. No. 2, Coatesville. Hunting without resident license	20.00
Wilcox, James Mack 3rd, Chester Road, Devon. Possessing loaded rifle in vehicle standing along highway	10.00
Young, Albert W., Lancaster Pike, R. D. No. 2, Malvern. Transporting parts of big game unmarked	25.00

CLEARFIELD—\$320

Balko, Robert S., Box 108, Winburns. Shooting within 150 yds. of occupied building	25.00
Bumbarger, Willard Clyde, R. D. No. 1, Woodland. Possessing parts of deer taken in closed season	5 days 95.00
Hoffman, Lynn P., Coalport. Attempting to take muskrat in closed season	10.00
Mabie, Jos. A., Hyde. Hunting game prior to opening hour first day	15.00
Natioli, Jos. T., 419 W. Front St., Clearfield. Shooting within 150 yds. of occupied building	25.00
Petrone, Dominic J., 428½ W. Front St., Clearfield. Shooting within 150 yds. of occupied building	25.00
Ross, Adam M., 499 Spruce St., Philipsburg. Shooting within 150 yds. of occupied building	25.00
Waring, George A., 807 3rd Ave., Clearfield. Killing spike buck in closed season	100.00

CLINTON—\$1360

Beaver, Calvin B., R. D. No. 2, Jersey Shore. Killing deer not having 2 or more points to one antler	100.00
Bennett, Robert, Castanea. Possessing loaded rifle in vehicle standing on highway	10.00
Beritz, Eva B., 360 E. Park St., Lock Haven. Killing male deer not having 2 points to one antler	100.00
Bower, Oliver G., R. D. No. 1, Lock Haven. Possessing deer unlawfully taken	100.00
Campbell, Harry T., 302 Huston St., Flemington. Possessing deer unlawfully taken	100.00
Casper, William C., Box 29, Drury Run, Renovo. Attempting to kill wild turkey in closed season	25.00
Crawford, Harry C., 295 Young Ave., Lock Haven. Possessing deer unlawfully taken	100.00
Dershem Lewis S., 108 E. Bald Eagle St., Lock Haven. Possessing deer unlawfully taken	100.00
Eyer, Earl C., 201 S. High St., Lock Haven. Possessing loaded rifle in vehicle in motion on highway	25.00
Heisey, Samuel, 362 E. Water St., Lock Haven. Transporting parts of big game unmarked	25.00
Heivly, Elwood R., 223 E. Bald Eagle St., Lock Haven. Killing second deer in one season	100.00
Hess, Franklin E., 1528 Erie Ave., Renovo. Failure to maintain complete roster	25.00
Hibbler, Harry H., Farrandsville. Failure to maintain roster of party hunting big game	25.00
Kepler Orrin R., Cross Forks. Possessing parts of deer taken in close season	100.00
Moore, Leroy T., Woolrich. Transporting parts of big game unmarked	25.00
Page, James, Island Route, Lock Haven. Possessing male deer taken in close season	100 days
Slaterbeck, Leroy S., Tylersville. Hunting without non-resident license	50.00

Smart, Robert K., 113 W. 4th St., Lock Haven. Failure to maintain complete roster of party hunting big game	25.00
Thomas, Jr., David W., 112 W. Main St., Lock Haven. Transporting parts of big game unmarked	25.00
Toot, George E., Farwell, Renovo. Possessing parts of deer in close season	100.00
Whyne, John C., Box 118, North Bend. Possessing bear unlawfully taken	200.00

COLUMBIA—\$335

Comstock, James A., R. D. No. 2, Berwick. Transporting untagged deer	25.00
Fisher, William C., R. D. No. 1, Bloomsburg. Unlawfully removing dead deer from Auxillary Refuge	100.00
Halterman, Walter L., Jerseytown. Unlawfully removing dead deer from Auxillary Refuge	100.00
Honaberger, Ira A., 746 Popular St., Bloomsburg. Transporting parts of big game unmarked	25.00
Long, Albert L., 516 E. 4th St., Bloomsburg. Failure to tag trap ..	10.00
Moore, Floyd W., R. D. No. 1, Berwick. Killing game between 5 P. M. and 7 A. M.	15.00
Slusser, Adrian E., R. D. No. 2, Catawissa. Transporting untagged deer	25.00
Wargo, Vincent, 105 E. North St., Centralia. Possessing loaded shotgun in vehicle standing on highway	10.00
Watts, Ivan W., 455 E. St., Bloomsburg. Failure to maintain complete roster of party hunting big game	25.00

CRAWFORD—\$100

Holben, Glenn J., Conneautville. Killing doe deer in close season	100.00
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CUMBERLAND—\$860

Alspaugh, Robert P., R. D. No. 2, Carlisle. Possessing deer unlawfully taken	100.00
Brightwell, Vernon E., R. D. No. 1, Mechanicsburg. Possessing loaded shotgun in vehicle standing along highway	10.00
Elchelberger, Glenn M., R. D. No. 5, Carlisle. Killing wild turkey in closed season	25.00
Farner, Luther M., 70 E. Penn St., Carlisle. Possessing loaded firearm in vehicle standing along highway	10.00
Hill, Harvey B., R. D. 2, Carlisle. Killing and possessing deer in close season	100.00
Louden, Wesley A., Boiling Springs. Possessing doe deer in close season	100.00
McClintock, Dale Jr., R. D. No. 4, Mechanicsburg. Possessing deer unlawfully taken	100.00
Rader, Donald E., Altoona Ave., Enola. Possessing loaded rifle in vehicle standing on highway	10.00
Schmiedel, Fred W., 29 N. 8th St., Lemoyne. Transporting parts of big game unmarked	25.00
Shenk, Francis L., R. D. No. 1, Mechanicsburg. Possessing deer unlawfully taken	100.00
Vogelsong, Lawrence, R. D., Mechanicsburg. Possessing deer unlawfully taken	100.00
Ward, Preston L., R. D. No. 1, Camp Hill. Shooting within 150 yds. of occupied building	25.00
Wheeler, William J., R. D. No. 4, Mechanicsburg. Possessing loaded rifle in vehicle in motion on highway	25.00
Windomaker, James R., R. D. No. 2, Gardners. Taking 3 wild rabbits through the use of box traps	30.00
Windomaker, Tony, R. D. No. 2, Gardners. Refusing to accompany officer after arrest	100.00

DAUPHIN—\$1405

Baddorf, Wesley W., 2332 N. 6th St., Hbg. Transporting parts of animal unmarked	25.00
Beatty, Alfred M., R. D. No. 1, Dauphin. Transporting parts of big game unmarked	25.00
Bopp, James J., 422 E. Market St., Williamstown. Cutting tree on state game land	25.00
Bottiglier, Milton J., R. D. No. 1, Linglestown. Attempting to kill deer in close season	100.00
Braim, Harry, R. D. No. 1, Dauphin. Shooting across highway while hunting game	25.00
Diehl, Eldon L., 7 Beech Land. Possessing loaded rifle in vehicle standing on highway	10.00
Dimpsey, Howard A., R. D. No. 2, Halifax. Transporting parts of big game unmarked	25.00
Henry, Paul R., R. D. No. 1, Linglestown. Hunting without resident license	20.00
Hoffman, Ben D., 1322 Kittanny St., Harrisburg. Transporting parts of big game unmarked	25.00
Hopple, Russell D., 210 East St., Williamstown. Transporting parts of big game unmarked	25.00
Horchler, Clark B., R. D. 1, Dauphin. Transporting parts of big game unmarked	25.00
Jefferies, Howard W., 2618 N. 5th St., Hbg. Hunting without resident license	20.00
Kessler, Clinton P., R. D. 1, Tower City. Failure to produce head of deer upon demand of officer	100.00
Lewis, Benjamin H., 4277 N. 6th St., Harrisburg. Assisting to transport bear unlawfully taken	200.00
Mausser, Allen, Spring Glen, Star Route. Possessing parts of deer taken in close season	100.00
Miller, Charles J., 122 W. Caracas Ave., Hershey. Transporting parts of big game animal unmarked	25.00
Ochs, Alden K., Gratz. Possessing parts of deer taken in close season	100.00
Paul, Chester E., Center St., Wilconisco. Possessing loaded rifle in vehicle standing along highway	10.00
Paul, John W., 26 N. 4th St., Halifax. Transporting parts of big game unmarked	25.00
Popovich, Michael, R. D. No. 1, Dauphin. Killing spike deer in close season	100.00
Reever, Alvin C., R. D. No. 1, Linglestown. Possessing doe deer in close season	100.00
Schreffler, William S., Star Route, Spring Glen. Possessing parts of deer taken in close season	100.00
Schwalm, Ira I., Star Route, Spring Glen. Possessing parts of deer taken in close season	100.00
Shandler, Morris D., 1325 N. 14th St., Hbg. Transporting parts of animal unmarked	25.00

Tuttle, Arnold W., 1020 Market St., Hbg. Transporting untagged deer	25.00
Waldlich, Ronald R., 47th and Franklin Sts., Lawnton. Transporting parts of big game unmarked	25.00
Weibley, Clarence E., 2006 McCleaster Ave., Harrisburg. Possessing loaded shotgun in vehicle standing along highway ..	10.00
Weibley, Otho R., 2006 McCleaster Ave., Hbg. Possessing loaded rifle in vehicle standing along highway	10.00

DELAWARE—\$725

Axson, John H., 1572 Glen Ave., Folcroft. Transporting parts of big game unmarked	25.00
Czarenko, Joseph, 2512 W. 6th St., Chester. Possessing loaded gun in vehicle standing along highway	10.00
Dantonio, Louis Jr., 2428 W. 9th St., Chester. Transporting parts of game unmarked	25.00
Fenstermacher, Clayton E., 1005 Ashland Ave., Eddystone. Transporting parts of big game unmarked	25.00
Hayes, Henry W., 613 Lanton Terrace, Holmes. Possessing loaded rifle in vehicle in motion along highway	25.00
Houck, Frederick L., 212 Primos St., Secane. Transporting parts of game unmarked	25.00
Kendus, William, 117 E. Chelton Rd., Parkside, Chester. Taking two muskrats in close season; Failure to tag 8 traps; Disturbing traps of another	125.00
Kling, Robert U., 1029 Washington St., Marcus Hook. Transporting parts of big game unmarked	25.00
Leshner, Herbert, 205 Margate Road, Upper Darby. Transporting small game unaccompanied by owner	20.00
Machemer, William P., P. O. Box 131 Rehoboth Beach. Hunting without non-resident license	50.00
O'Neill, Eugene T., 14 Bethel Rd., Boothwyn. Taking two Muskrats in closed season	20.00
Ozwirk, John, 5163 W. 13 Drive, West Brook Park, Clifton Heights. Possessing loaded rifle in vehicle in motion on highway	25.00
Sivlerl, Leandro, 817 Bedford Ave., Collingdale. Hunting wild birds or animals in safety zone; hunting game between 5 P. M. & 7 A. M.	40.00
Taraba, Paul A., 3939 Bridge St., Drexel Hill. Possessing loaded rifle in vehicle standing along highway	10.00
Trexler, Norman E., 300 W. 15th St., Chester. Transporting parts of big game unmarked	25.00
Troffo, Frank L., 940 Lloyd St., Chester. Shooting within 150 yds. of occupied building; killing second deer in one season; attempting to kill third deer in one season	225.00
Wear, William David, 315 Carre Ave., Essington. Transporting parts of big game unmarked	25.00

ELK—\$95.00

Boderocco, Stanley, Brandy Camp. Possessing one muskrat in closed season	10.00
Freeman, Byron V., 618 West Main St., Rldgway. Possessing 3 muskrats in closed season	30.00
Lease, Lynn E., Box 75, Grant Rd., Rldgway. Failure to tag deer within 1 hour after killing	10.00
Moroski, Andrew R., 300 Fairview Ave., Johnsonburg. Removing deer from place killed without tag attached	10.00
Petrucelli, Jos. B., Force. Possessing loaded rifle in vehicle in motion on highway	25.00
Tassns, Stephen A., 322 First Ave., Johnsonburg. Possessing loaded rifle in vehicle standing along highway	10.00

ERIE—\$130

Ellsworth, Lloyd O., R. D. No. 5, North East. Killing male deer without 2 points to one antler	100.00
Hazen, Fay M., 551 W. 4th St., Erie. Removing deer from place killed without tag	10.00
Hoenes, Jas. M., 2657 Chestnut St., Erie. Possessing loaded rifle in vehicle standing along highway	10.00
Hoenes, John J., 2657 Chestnut St., Erie. Possessing loaded rifle in vehicle standing along highway	10.00

FAYETTE—\$870

Bacha, Frank, R. D. No. 2, Box 109, Uniontown. Setting fifteen traps for muskrats prior to opening date; taking two muskrats in closed season	170.00
Beam, Clarence, Box 480, R. D. No. 1, Clairton. Possessing loaded rifle in vehicle standing along highway	10.00
Black, John E., Box 104, Wick Haven. Taking muskrat in closed season	10.00
Danko, Steve J., R. D. No. 1, Smithfield. Possessing loaded rifle in vehicle standing along highway	10.00
Dawson, George D., Rear 62 Lenox St., Uniontown. Possessing loaded rifle in vehicle standing along highway	10.00
Eutsey, Charles A., 209 N. Cottage Ave., Connellsville. Transporting large game unmarked	25.00
Everly, Glen W., R. D. No. 1, Dunbar. Possessing two muskrats taken in closed season	20.00
Frye, James F., Box 189, Everson. Killing second buck deer in one season	100.00
Hall, William F., R. D. No. 2, Box 266, Connellsville. Hunting without resident license	20.00
Hiels, James L., Elm St., Fairchance. Killing spike buck in closed season	100.00
Jaskolski, Walter J., R. D. No. 2, Connellsville. Transporting untagged deer	25.00
Jones, Carl R., 177 Brashear St., Brownsville. Possessing loaded shotgun in vehicle standing on highway	10.00
Kashary, Edward G., Box 302, R. D. No. 2, Uniontown. Possessing loaded rifle in vehicle standing along highway	10.00
Kitta, Stanley, Fairbanks. Shooting within 150 yds. of occupied building	25.00
Kruczkiewicz, Andrew Frank, R. D. No. 2, Box 146, Connellsville. Killing male deer not having 2 points to one antler	100.00
Lankey, Thomas C., R. D. No. 1, Acme. Possessing loaded rifle in vehicle standing	10.00
McCann, Kenneth E., R. D. No. 1, Upper Middletown. Possessing one muskrat taken in closed season	10.00
McCoy, Alfred G., Box 386, Fairchance. Assisting to conceal deer unlawfully killed	100.00
Marchute, Stanley W., Box 1641, Uniontown. Possessing loaded rifle in vehicle standing along highway	10.00
Miller, Clifford L., R. D. No. 1, Brownsville. Shooting at unprotected target in big game season	10.00

Newman, Arthur C., R. D. No. 4, Uniontown. Possessing loaded shotgun in vehicle standing along highway	10.00
Oliver, Thomas E., Hopwood. Possessing loaded rifle in vehicle standing on highway	10.00
Portman, David F., Box 546, Cook St., Fayette City. Possessing loaded rifle in vehicle standing along highway	10.00
Rivak, Steve, Box 421, McClellandtown. Possessing loaded rifle in vehicle in motion on highway	25.00
Rose, James R., Box 54, Wick Haven. Taking muskrat in closed season	10.00
Rowe, Irwin R., 440 Evans St., Uniontown. Possessing loaded rifle in vehicle standing along highway	10.00
West, James R., R. D. No. 2, Belle Vernon. Possessing loaded shotgun in vehicle standing along highway	10.00

FRANKLIN—\$530

Boyer, Charles R., 124 Hamilton Ave., Waynesboro. Possessing loaded rifle in vehicle in motion on highway	25.00
Dade, James K., Clyde St., Waynesboro. Possessing loaded gun in vehicle standing along highway	10.00
Freeman, Franklin L., Box 83, Shady Grove. Attempting to take muskrat in closed season	10.00
Gsell, Reginald M., Marlon. Setting steel trap closer than 5 feet from hole	10.00
Harbaugh, Harry V., R. D. No. 4, Waynesboro. Hunting antlerless deer after abrogation procedure	25.00
Harbaugh, Herbert W., Jr., R. D. No. 4, Waynesboro. Hunting antlerless deer after abrogation proceedings	25.00
Harbaugh, Raymond W., R. D. No. 4, Waynesboro. Hunting antlerless deer after abrogation proceedings	25.00
Harbaugh, Richard E., R. D. No. 4, Waynesboro. Hunting antlerless deer after abrogation proceedings	25.00
Harbaugh, Robert E., R. D. No. 4, Waynesboro. Possessing loaded rifle in car standing along highway	10.00
Henicle, Charles A., R. D. No. 1, Waynesboro. Possessing loaded rifle in vehicle standing along highway	10.00
Hess, Ronald D., St. Thomas. Hunting without a resident hunting license	20.00
Houser, Thomas S., 259 S. Main St., Chambersburg. Shooting within 150 yds. of occupied building	25.00
Kell, Jess E., Shady Grove. Possessing loaded rifle in vehicle standing on highway	10.00
Knable, Charles N., Box 25, Fayetteville. Possessing loaded rifle in vehicle standing along highway	10.00
Long, Robert, R. D. No. 3, Greencastle. Shooting across highway while hunting game	25.00
Long, Vincent C., R. D. No. 2, Mercersburg. Killing doe deer in closed season	100.00
Moroen, Rollo P., State Line. Failure to produce roster of party hunting big game	25.00
Stambaugh, Melvin F., 517 North Franklin St., Chambersburg. Hunting deer with automatic rifle	100.00
Stine, Harold E., 311 W. 3rd St., Waynesboro. Possessing loaded rifle in vehicle standing along highway	10.00
Swope, Paul C., R. D. No. 1, Greencastle. Possessing loaded shotgun in vehicle standing along highway	10.00
Welsh, James W., Box 83, Shady Grove. Attempting to take muskrat in closed season	10.00
Welsh, Junior D., Box 83, Shady Grove. Attempting to take muskrat in closed season	10.00

FULTON—\$170

Black, Glen A., Rd Wells Tannery. Failure to maintain complete roster of party hunting game	25.00
Clark, Raymond Guy, Needmore. Hunting without resident license	20.00
Hess, Orlin N., Warfordsburg, R. D. No. 1. Shooting across highway while hunting game	25.00
Mellott, Frank G., Crystal Springs. Killing doe deer in closed season	100.00

GREENE—\$80.00

Bartolovich, John, R. D. No. 1, Waynesburg. Failure to maintain proper roster	25.00
Bowermaster, Ritner P., Davistown. Possessing loaded rifle in vehicle standing along highway	10.00
Evosevich, Milan, R. D. No. 1, Rices Landing. Disturbing the traps of another	25.00
Nagy, Joseph, Box 267, Carmichaels. Attempting to kill squirrel in closed season	10.00
Rinehart, Byron, R. D. No. 2, Waynesburg. Possessing loaded rifle in vehicle standing along highway	10.00

HUNTINGDON—\$890

Anspach, George M., Petersburg. Possessing loaded rifle in vehicle standing along highway	10.00
Barber, Charles L., McConnellstown. Refusing to go with officer after arrest	100.00
Blair, John C., Blairs Mills. Possessing loaded rifle in vehicle standing on highway	10.00
Branthafer, Guy L., 1780 Townsend Ave., Detroit, Mich., & Mapleton Depot. Refusing to go with officer after arrest	100.00
Estep, Robert L., R. D. No. 3, Huntingdon. Refusing to go with officer after arrest	100.00
Hamman, Frank B., Box 208, R. D. No. 1, Mt. Union. Transporting parts of deer untagged	25.00
Hammond, Howard E., R. D. No. 1, Three Springs. Being careless while hunting turkey	25.00
Huges, Earl C., R. D. No. 1, Mt. Union. Killing second deer in one season	100.00
Huges, Ray L., R. D. No. 1, Huntingdon. Killing second deer in one season	100.00
Irvin, Charles, Mt. Union. Possessing deer in closed season	100.00
Lane, Richard, Robertsdale. Hunting without resident license ..	20.00
Sarra, Anthony H., 16 E. Garber St., Mt. Union. Possessing big game in closed season	100.00
Shehan, Russell, 14 Cherry St., Mt. Union. Possessing doe deer in closed season	100.00

INDIANA—\$980

Altamus, Hugh M., R. D. No. 1, Homer City. Possessing loaded rifle in vehicle in motion	25.00
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Arnick, Mike, R. D. No. 2, Indiana. Transporting untagged deer ..	25.00
Beer, Howard G., R. D. No. 1, Clymer. Shooting within 150 yds. of occupied building	25.00
Cable, Merle J., R. D. No. 2, New Florence. Failure to produce head of deer upon demand	100.00
Crusan, Jr., W. E., Box 94, Black Lick. Possessing loaded rifle in vehicle standing along highway	10.00
Dunmire, John C., R. D. No. 2, New Florence. Killing doe deer in closed season	100.00
Egry, Joe J., R. D. No. 2, Livermore. Killing male deer in closed season	100.00
Foltz, Allen V., Ernest. Possessing male deer taken in closed season	100.00
Gallina, Martin, Box 3, Arcadia. Shooting at target more than 200 yds. from camp	10.00
Gonda, Leonard, Box 73, Waterman. Transporting parts of big game unmarked	25.00
Gonschak, Jr., George, Box 11, Arcadia. Shooting at target more than 200 yds. from camp	10.00
Hanna, Chas. W., Box 198, Black Lick. Possessing loaded rifle in vehicle standing along highway	10.00
Hudak, Pete, 50 Sage St., Clymer. Removing deer from place killed without tagging	10.00
Kridler, Harvey P., 31 Morris St., Clymer. Failure to display license tag while hunting	20.00
Neal, Wilbur J., North Point. Killing male deer in closed season ..	100.00
Palmer, Bernard H., R. D. No. 2, Marlon Center. Interfering with State Officer in performance of duty	100.00
Pardee, Stanley, R. D. No. 1, Rochester Mills. Hunting without resident license	20.00
Pearce, Edward L., R. D. No. 2, Rochester Mills. Failure to maintain complete roster of party hunting big game	25.00
Pizer, Samuel E., R. D. No. 2, Box 63, Homer City. Transporting parts of big game unmarked	25.00
Pounds, Robert B., Penn Run. Hunting for deer between 5 P. M. & 7 A. M.	15.00
Prince, Christy, R. D. No. 1, Homer City. Lending hunting license and tag to another	20.00
Smrek, Tom E., Coral. Possessing loaded shotgun in vehicle standing on highway	10.00
Trimble, James S., 129 E. Burrell St., Blairsville. Possessing loaded rifle in vehicle standing on highway	10.00
Tyger, Louis E., 203 Water St., Indiana. Failure to produce proper roster	25.00
Vargok, Edward, R. D. No. 2, Homer City. Shooting within 150 yds. of occupied building	25.00
Wille, Albert R., Clymer. Transporting parts of big game unmarked	25.00

JEFFERSON—\$105

Demko, Joseph, R. D. No. 5, Punxsutawney. Shooting at target more than 200 yds. from camp	10.00
Evans, Thomas K., 115 Third St., Reynoldsville. Failure to tag deer within one hour after killing	10.00
Geist, Homer L., R. D. No. 3, Brookville. Failure to maintain roster of party hunting big game	25.00
Infantino, Thomas J., Box 231, Anita. Failure to maintain roster of party hunting big game	25.00
Parise, Frank, Walston. Possessing loaded rifle in vehicle standing on highway	10.00
Venture, Armond, Main St., Sykesville. Shooting within 150 yds. of occupied building	25.00

JUNIATA—\$65.00

Bollinger, Dallas S., R. D., Honey Grove. Possessing muskrat skin in closed season	10.00
Buchanan, John R., R. D., Honey Grove. Failure to tag deer within 1 hour after killing	10.00
Clugston, George S., R. D., East Waterford. Possessing loaded rifle in vehicle standing along highway	10.00
Hockenberry, James W., R. D., E. Waterford. Possessing loaded rifle in vehicle standing along highway	10.00
Leister, Paul L., McAllisterville. Shooting within 150 yds. of occupied building	25.00

LACKAWANNA—\$500

Connors, Francis, J., 608 N. Hyde Park Ave., Scranton. Hunting rabbits with shotgun containing more than 3 shells	10.00
Gall, Guerino, 318 Dunlap St., Peckville. Hunting game with shotgun containing more than 3 shells	10.00
Heib, George J., 1017 R. Pittston Ave., Scranton. Possessing loaded rifle in vehicle standing along highway	10.00
Kelfer, Herbert E., R. D. No. 1, East Earl. Attempting to kill second deer in one season	100.00
Martinkus, Leo G., 1419 Gardner Ave., Scranton. Transporting untagged deer	25.00
Mastrocola, Joseph W., 8 Oakwood Place, Scranton 10. Killing 2 ringneck pheasants	50.00
Ruthkosky, Joseph E., 121 Crane St., Minooka. Possessing loaded shotgun in vehicle standing along highway	10.00
Sheaffer, Leverage, R. D. No. 3, Hanover. Shooting at random in big game season	10.00
Shrelmer, Lloyd H., R. D. No. 2, Lititz. Attempting to kill second deer in one season	100.00
Simpson, George, 411 Mary St., Dickson City. Possessing loaded rifle in vehicle standing along highway	10.00
Sultzberger, Ralph L., 108 E. Locust St., Mechanicsburg. Failure to tag deer within 1 hour after killing	10.00
Ufalussy, John, 1506 S. Irving Ave., Scranton. Hunting without resident license	20.00
Washisko, Edward C., 640 Bednar St., Dunmore. Possessing deer unlawfully taken	100.00
Williams, Stewart E., R. D. No. 1, Hanover. Failure to tag deer within 1 hour after killing	10.00
Zeager, Jr., Frank, Elizabethtown, R. D. No. 2. Shooting across highway while hunting	25.00

LANCASTER—\$540

Bachman, Melvin S. (Blainsport), R. D. No. 1, Reinholds. Possessing loaded rifle in vehicle standing along highway	10.00
Cooke, Lloyd G., 44 N. Market St., Elizabethtown. Shooting within 150 yds. of occupied building	25.00
Evans, Walter E., R. D. No. 8, Lancaster. Taking muskrat in closed season	10.00

Forry, Ray S., R. D. No. 4, Lititz. Using a vehicle to hunt for pheasants	50.00
Greenawalt, Henry B., R. D. No. 1, Columbia. Failure to maintain roster of party hunting big game	25.00
Helsey, David W., R. D. No. 1, Lititz. Possessing loaded rifle in vehicle in motion on highway	25.00
Hershey, L. N., 78 S. Hazel St., Manheim. Shooting within 150 yds. of occupied building	25.00
Hornberger, Donald E., Browntown. Setting one steel trap closer than 5 feet from hole	10.00
Kautz, Herbert, 622 Lake St., Lancaster. Failure to properly display license tag while hunting	20.00
Kurtz, David B., 36 E. 2nd St., Lititz. Possessing loaded rifle in vehicle standing along highway	10.00
Marzinko, Kenneth B., Hotel Kinney, Columbia. Hunting while hunting rights have been denied	40.00
Metzger, Eugene C., R. D. No. 7, Lancaster. Hunting without resident license	20.00
Paul, Bennie L., R. D. No. 1, Denver. Transporting parts of big game unmarked	25.00
Riehl, Amos E., R. D. No. 2, Lancaster. Possessing loaded rifle in vehicle in motion on highway	25.00
Shiffer, Robert S., Bol-Mor Apt. No. 4, Elizabethtown. Shooting at unprotected target during big game season	10.00
Stauffer, Richard T., 30 N. Mulberry St., Lancaster. Failure to properly display license tag while hunting	20.00
Troop, Walter, 30 N. Mulberry St., Lancaster. Failure to properly display license tag while hunting	20.00
Wallace, Lester G., R. D. No. 2, New Holland. Assisting to conceal deer unlawfully killed	100.00
Weiler, Ralph, Lincoln. Using auto to hunt ringneck pheasant ..	50.00
Zimmerman, Eugene H., R. D. No. 1, Denver. Failure to display license tag while hunting	20.00

LAWRENCE—\$30.00

Cook, Harold C., 512 Loop St., Ellwood City. Possessing loaded rifle in vehicle standing along highway	10.00
Marino, Angelo J., R. D. No. 8, New Castle. Possessing loaded shotgun in vehicle standing along highway	10.00
Morrow, George E., 349 Neshannock Ave., New Castle. Possessing loaded rifle in vehicle standing along highway	10.00

LEBANON—\$45.00

Blouch, John D., 436 Oak St., Lebanon. Shooting at unprotected target during big game season	10.00
Dove, Otis A., 227 W. Main St., Annville. Failure to tag deer within one hour after killing	10.00
Grumbine, Light A., R. D. 2, Myerstown. Destroying shrubs on State Game Lands	25.00

LEHIGH—\$435

Beller, Harrison, R. D. No. 1, Breinigsville. Failure to tag trap ..	10.00
Bodock, Michael, 2026 Arch St., Bethlehem. Transporting part of big game animal unmarked	25.00
Christman, Clair F., 651 Fernwood St., Emmaus. Failure to produce roster of party hunting big game	25.00
Corbo, Joseph, 949 N. 5th St., Allentown. Possessing pheasant hen ..	25.00
Derr, Paul W., R. D. No. 1, Allentown. Shooting upon lands of park	25.00
Ettinger, Charles E., 1613 Tilghman St., Allentown. Failure to produce roster of party hunting big game	25.00
Frantz, Robert N., 506 Wyoming St., Allentown. Killing male deer in closed season; transporting untagged deer	125.00
Hausman, Melvin R., R. D. No. 1, Germansville. Transporting parts of big game animal unmarked	25.00
Kleckner, Amos P., R. D. No. 1, Allentown. Failure to display license tag while hunting	20.00
Myers, Clarence E., 233 N. Jordan St., Allentown. Possessing loaded rifle in vehicle standing on highway	10.00
Rechia, Henry A., 427 Cedar St., Allentown. Failure to tag trap ..	10.00
Schleicher, Clayton F., R. D. No. 1, Allentown. Shooting upon lands of park	25.00
Schleicher, Clifford J., R. D. No. 1, Allentown. Shooting upon lands of park	25.00
Schlicher, Lewis J., 1824 E. Clair St., Allentown. Possessing loaded rifle in vehicle standing on highway	10.00
Schock, Paul H., R. D. No. 1, Slatinton. Shooting on lands of park	25.00
Sprow, Donald R., Breinigsville. Transporting parts of big game animal unmarked	25.00

LUZERNE—\$1070

Adriani, Alfred J., R. D. No. 2, Wilkes-Barre. Making false statement to secure resident license	20.00
Answini, Bert, R. D. No. 1, Wilkes-Barre. Failure to tag deer within one hour after killing	10.00
Atwell, Charles B., 30 Laurel St., Pittston. Possessing loaded rifle in vehicle in motion on highway	25.00
Bartol, Angelo L., R. D. No. 2, White Haven. Possessing skins of furbearing animals unlawfully killed	30.00
Beilman, George W., 458 Main St., Luzerne. Hunting rabbits with more than 3 shells in shotgun	10.00
Cavaller, Rocco S., 686 Garfield St., Hazleton. Possessing loaded rifle in vehicle standing along highway	10.00
Conlon, Paul J., Jr., Bear Creek. Killing a second deer in one season	100.00
Eckhart, Leslie E., 506 Pierce St., Kingston. Shooting at unprotected target in big game season	10.00
Hardy, Alfred C., 26 W. Bennett St., Kingston. Transporting untagged deer	25.00
Harrison, William G., R. D. 1, Harveys Lake. Possessing parts of deer taken in closed season	100 days
Hess, George I., Drums. Using artificial light to hunt for big game	100.00
Hinkle, Warren R., Drums. Using artificial light to hunt for big game	100.00
Hoch, Floyd A., R. D. No. 2, Wapwallopen. Killing a rabbit in closed season	10.00
Johns, William D., 6 Erie St., Pittston. Failure to display license tag while hunting	20.00
Kocylowski, Harry, 247 Boland Ave., Lee Park, Wilkes-Barre. Failure to tag deer within one hour after killing	10.00

Kulina, Robert A., 390 Schuyler Ave., Kingston. Killing doe deer in closed season	100.00
Lamoreaux, John J., R. D. No. 1, Plymouth. Hunting game between 5 P. M. & 7 A. M.	15.00
Magagna, James D., Glen Summit. Shooting within 150 yds. of occupied building	25.00
Matiska, Peter, 82 Kado St., Parsons. Shooting at unprotected target in big game season	10.00
Mazur, Nicholas, 10 Ash Court, Exeter. Failure to tag one trap ..	10.00
Menichini, Attio P., 40 Poole St., Pittston. Failure to tag deer within one hour after killing	10.00
Milbrodt, Edward, R. D. No. 1, Dallas. Possessing parts of deer taken in closed season	100.00
Milbrodt, Leo, R. D. No. 1, Dallas. Possessing parts of deer taken in closed season	100.00
Moore, Gordon, 419 Maple St., Freeland. Failure to tag deer before moving carcass	10.00
Niemenski, Paul A., 205 Boland Ave., Wilkes-Barre. Failure to tag trap	10.00
Perkoski, John L., 50 Slope St., Plains. Failure to report shooting accident causing injury to another	25.00
Prokop, Joseph B., Drums. Failure to tag deer before moving same	10.00
Snyder, Eugene, 66 Yale St., Wilkes-Barre. Failure to tag deer within one hour after killing	10.00
Solenske, Joseph F., 305 N. Grant St., Wilkes-Barre. Failure to maintain complete roster of party hunting big game	25.00
Spaide, Glen P., 21 Oakdale, Freeland. Failure to tag deer before moving same	10.00
Spencer, Charles W., Hunlock Creek. Dog chasing deer	25.00
Steinruck, William A., Benton. Digging out den of furbearers; failure to display license tag while hunting	30.00
Steward, Arthur L., Jr., 529 Front St., Freeland. Possessing loaded gun in vehicle standing on highway	10.00
Urenovich, Aloysius F., 1010 Centre St., Freeland. Transporting parts of big game animal unmarked	25.00
Washinski, Wasil, 73 E. Kirmar Ave., Alden Station. Failure to tag deer within one hour after killing	10.00
Wyda, Edward A., 90 Orchard St., Glen Lyon. Possessing loaded rifle in vehicle standing on highway	10.00
Zajac, John, R. D. No. 2, Wapwallopen. Attempting to collect bounty by giving false date of killing	10.00

LYCOMING—\$1315

Bosch, Marlow E., 1717 Lycoming Creek Road, Williamsport. Transporting untagged deer	25.00
Brown, Charles I., 2437 Euclid Ave., Duboisstown. Failure to display license tag while hunting	20.00
Brown, Samuel H., 321 Allegheny St., Jersey Shore. Possessing loaded rifle in vehicle standing on highway	10.00
Carson, Dean L., R. D. No. 2, Jersey Shore. Shooting across highway while hunting game	25.00
Chilson, Earl H., 1617 W. Southern Ave., South Williamsport. Failure to render full assistance after shooting human being ..	100.00
Fox, Robert M., R. D. No. 1, Montgomery. Attempting to kill a deer in closed season	100.00
Fry, Herman W., R. D. No. 1, Linden. Aiding and assisting in the concealment of illegally killed deer	100.00
Gansell, Louis M., R. D. No. 2, Muncy. Staking out and setting 8 traps for muskrats prior to opening hour	80.00
Hafer, Kenneth R., Trout Run. Possessing parts of deer taken in closed season	100.00
Hoover, Elwood C., Linden. Transporting untagged deer	25.00
Mitchley, Edgar J., R. D. No. 1, Cogan Station. Possessing parts of deer taken in closed season	100.00
Stackhouse, Joseph D., 85 S. 4th St., Hughesville. Assisting in the concealment of illegally killed deer	100.00
Tominson, Clarence A., R. D. No. 2, Montoursville. Killing deer in State Game Refuge	100.00
Walters, Eugene L., R. D. No. 3, Williamsport. Attempting to kill deer in closed season	100.00
Werner, Gordon L., R. D. No. 1, Unityville. Possessing 3 deer taken in closed season	100.00
Wright, Ralph H., Antes Fort. Taking 3 muskrats in closed season	30.00

McKEAN—\$350

Bigley, Robert W., R. D. No. 2, Eldred. Failure to tag 2 traps ..	20.00
Boring, Ray F., R. D. No. 1, Bradford. Possessing loaded rifle in vehicle standing on highway	10.00
Davis, W. E., 102 Bank St., Smethport. Shooting within 150 yds. of occupied building	25.00
Holly, Thad N., Rixford. Possessing loaded rifle in vehicle in motion on highway	25.00
Holly, William A., Duke Center. Shooting at rabbit not plainly visible	10.00
Hull, Joseph N., 103 Main St., Smethport. Possessing loaded rifle in vehicle in motion on highway	25.00
Kerstetter, Harvey G., Duke Center. Possessing loaded rifle in vehicle in motion on highway	25.00
Keyes, Joseph C., Lewis Run. Attempting to collect bounty on fox by giving false dates	10.00
Larron, Loren M., 217½ Yarnell St., Kane. Hunting with firearm while under influence of liquor	25.00
Larson, Walter B., Anderson St., Mt. Jewett. Killing spike buck deer in close season	100.00
Walker, Robert E., Duke Center. Hunting with firearm, not properly accompanied, when under 16 years of age	20.00
Work, Delmar L., 46 Nelson St., Smethport. Shooting within 150 yds. of occupied building	25.00
Yale, Clarence R., 289 S. Ave., Bradford. Possessing loaded rifle in vehicle standing on highway	10.00
Yale, Dean M., 289 S. Ave., Bradford. Possessing loaded rifle in vehicle standing on highway	10.00
Yale, Clarence R., 4 Pike St., Bradford. Possessing loaded rifle in vehicle standing on highway	10.00

MERCER—\$70.00

Eckleberger, William J., 322 New Castle, Sharon. Possessing loaded rifle in vehicle standing on highway	10.00
Kusmus, Steve, 240 N. Water St., Sharon. Shooting within 150 yds. of occupied buildings	25.00
Laidy, Ivan P., 476 Nimick St., Sharon. Shooting at target more than 200 yds. from camp in big game season	10.00

Rainey, Frank W., R. D. 4, Grove City. Camping on State Game Lands	25.00
MIFFLIN—\$820	
Fisher, Calvin L., R. D. No. 1, Lewistown. Possessing doe deer taken in closed season	100.00
Grennaway, Howard, R. D. No. 3, Lewistown. Possessing loaded rifle in vehicle in motion on highway	25.00
Huffnagle, Joseph W., R. D. No. 3, Lewistown. Possessing loaded rifle in vehicle standing on highway	10.00
Lauver, Chester B., R. D. No. 1, Mifflintown. Shooting at unprotected target in big game season; shooting within 150 yds. of occupied building	35.00
Mahoney, William H., R. D. No. 2, Lewistown. Killing second deer in one season	100.00
Shehan, Calvin C., Newton Hamilton. Possessing doe deer taken in closed season	100.00
Shehan, Clarence F., Newton Hamilton. Possessing doe deer taken in closed season	100.00
Shehan, Wendal J., Newton Hamilton. Possessing doe deer in closed season	100.00
Sunderland, Lewis C., R. D. No. 1, McVeytown. Possessing doe deer in closed season	100.00
Umbel, Jr., Francis M., R. D. No. 3, Hays. Shooting within 150 yds. of occupied building	25.00
Yoder, Joseph I., Reedsville, R. D. Killing second deer in one season	100.00
Yoder, Merle E., R. D. No. 1, Reedsville. Killing ringneck pheasant hen	25.00

MONROE—\$275

Babcock, Leslie R., Tannersville. Transporting parts of big game unmarked	25.00
Bartholomew, Gene F., R. D. No. 1, Kunkletown. Killing male deer not having 2 points to one antler; Possessing deer unlawfully taken	200.00
Flish, Richard V., Cresco. Possessing loaded rifle in vehicle in motion on highway	25.00
Stone, Arlington E., Box 51, Tannersville. Transporting parts of big game unmarked	25.00

MONTGOMERY—\$1315

Allen, Willard J., Jarrettsville. Killing second deer in one season	100.00
Bannak, William J., 424 Highland Ave., Jenkinstown. Killing deer by using .22 cal. cartridge	100.00
Castle, Sr., Arthur, 415 Fairview, North Wales. Possessing loaded rifle in vehicle standing along highway	10.00
Chain, Charles H., 99 Windsor Ave., Narbarth. Shooting upon lands of park	25.00
Crawford, James C., 1330 Arch St., Norristown. Transporting parts of big game unmarked	25.00
Culp, Harold T., North Hills Ave., Willow Grove. Transporting parts of big game unmarked	25.00
Dixon, Richard A., P. O. Box 127, Gladwyne. Hunting without resident license	20.00
Dorn, Richard B., Telford. Shooting at unprotected target in big game season	10.00
Frymoyer, Joseph E., 616 Beech St., Pottstown. Hunting without resident license	20.00
Godshall, Leon V., Sumneytown. Transporting parts of big game unmarked	25.00
Gulliver, Clarence M., Stowe. Transporting parts of big game unmarked	25.00
Hoover, Warren B., R. D. No. 3, Pottstown. Hunting within 150 yds. of occupied building	25.00
Ifert, George, R. D. No. 1, Ambler. Transporting parts of big game unmarked	25.00
Koch, Thomas L., R. D. No. 4, Norristown. Transporting parts of big game unmarked	25.00
Kratz, Thomas F., 603 Walnut St., Lansdale. Failure to maintain proper roster	25.00
Long, Joseph D., Gilbertsville. Shooting at random during big game season	10.00
Long, Kenneth W., Gilbertsville. Shooting at random during big game season	10.00
McGinley, Robert A., Box 530, Ambler. Failure to maintain complete proper roster	25.00
Moses, Ernest A., 343 W. 11th Ave., Conshohocken. Killing doe deer in close season; Possessing doe deer in close season	200.00
Moulder, Raymond L., 36 E. 3rd St., Pottstown. Possessing loaded rifle in vehicle in motion on highway	25.00
Odenweller, John S., Chester Heights, Media, R. D. No. 2. Failure to produce proper roster	25.00
Olesh, John A., 461 N. Franklin St., Pottstown. Hunting within 150 yds. of occupied building	25.00
O'Neill, Alfred J., 845 Charlotte St., Pottstown. Hunting within 150 yds. of occupied building	25.00
Rosenberger, Richard Paul, 169 Jenkins Ave., Lansdale. Killing rabbit in closed season	10.00
Rumpilla, Donald W., Road A, Apt. 57, Hilldale, Pottstown. Transporting parts of big game unmarked	25.00
Seeders, Edward D., 501 W. Buttonwood St., Pottstown. Hunting within 150 yds. of occupied building	25.00
Turkelson, Glenn A., 218 Edgemont Ave., Ardmore. Killing 4 point buck deer in closed season	100.00
Webb, Thomas C., Elkview. Failure to maintain roster of party hunting big game	25.00
Worthing, James T., R. D. No. 2, Collegeville. Transporting game unlawfully killed; Killing one deer over season limit	200.00
Zintak, Walter, R. D. No. 1, Green Lane. Attempting to kill second deer in one season	100.00

MONTOUR—\$200

Sidler, Edward A., R. D. No. 2, Danville. Possessing deer unlawfully taken	100.00
Sidler, Phillip A., R. D. No. 2, Danville. Using a motor vehicle to transport deer unlawfully taken	100.00

NORTHAMPTON—\$500

Achey, Lawrence E., 915 New York Ave., Hellerton. Failure to display license tag while hunting	20.00
Bartholomew, Russell P., R. D. No. 1, Bath. Taking nine muskrats in close season	90.00
Boyle, Calvin A., R. D. No. 2, Northampton. Possessing loaded shotgun in vehicle standing along highway	10.00
Boyle, Harry L., R. D. No. 2, Northampton. Possessing loaded rifle in vehicle standing along highway	10.00

Dillon, Albert A., 318 N. New St., Bethlehem. Transporting parts of big game unmarked	25.00
Gilbert, Kenneth G., R. D. No. 2, Walnutport. Possessing loaded shotgun in vehicle in motion on highway	25.00
Hildenbrandt, Jr., Charles A., R. D. No. 1, Bath. Assisting to take five muskrats in closed season	50.00
Jones, William B., 629 Walnut St., Bangor. Failure to visit trap within 36 hours	10.00
Kasebier, Robert D., R. D. No. 1, Bangor. Failure to tag deer within one hour after killing	10.00
Meuser, Jr., John Fred, 2711 Northampton St., Easton. Failure to tag trap	10.00
Muschlitz, Lovine J., R. D. No. 2, Nazareth. Possessing loaded rifle in vehicle standing along highway	10.00
Recker, William J., R. D. No. 1, Northampton. Hunting without resident license	20.00
Sefranek, Louis A., R. D. No. 3, Easton. Possessing male deer taken in closed season	100.00
Stayer, John L., 1037 Mechanic St., Bethlehem. Hunter damaging property; Shooting within 150 yds. of occupied building; Shooting across highway while hunting game	75.00
Wester, Victor, R. D. No. 4, Easton. Possessing loaded rifle in vehicle in motion on highway	25.00
Zettlemoyer, Herbert A., 1006 Sunset Lane, Bethlehem. Possessing loaded rifle in vehicle standing along highway	10.00

NORTHUMBERLAND—\$815

Aldrigetti, Benjamin, 419 E. 4th St., Mt. Carmel. Failure to tag deer within one hour after killing	10.00
Bahner, Benjamin F., 518 Susquehanna Ave., Sunbury. Killing doe deer in closed season	100.00
Barnhill, Frank W., 54 Rear Center St., Milton. Possessing male deer taken in closed season	100.00
Berkheimer, Albert J., 600 Columbia Ave., Milton. Possessing male deer taken in closed season	100.00
Dietrick, Richard S., 303 Center St., Shamokin. Possessing male deer not having two points on one antler	100.00
Fuller, Ralph W. E., Turbotville. Hunting without resident license	20.00
Kreisher, George E., Sr., R. D. No. 2, Box 371A Shamokin. Possessing male deer not having two points to one antler	100.00
Machesic, Stanley B., R. D. No. 1, Paxinos. Shooting within 150 yds. of occupied building	25.00
Markowski, Edward, R. D. No. 2, Sunbury. Possessing 3 muskrats in closed season	30.00
Milan, J., Atlas. Failure to tag deer within 1 hour after killing	25.00
Minnier, Paul R., R. D. No. 1, Paxinos. Possessing illegal deer ..	100.00
Reed, Robert G., 102 W. 6th St., Sunbury. Possessing loaded rifle on vehicle standing along highway	10.00
Shuler, William E., 4 Willow St., Shamokin. Possessing loaded rifle in vehicle in motion along highway	25.00
Swank, George S., Snyderstown. Possessing loaded rifle in vehicle in motion on highway	25.00
Whitney, Mason L., R. D. No. 2, Shamokin. Possessing loaded rifle in vehicle in motion on highway; Failure to tag deer within one hour after killing	35.00
Zeigler, Curtis E., Red Lion. Possessing loaded rifle in vehicle standing on highway	10.00

PERRY—\$55.00

DePacolo, Luigi, R. D. No. 2, Duncannon. Transporting untagged deer	25.00
Smith, Clarence T., R. D. No. 2, Blain. Failure to tag deer within 1 hour after killing	10.00
Weibley, William H., R. D. No. 1, Shermansdale. Hunting without resident license	20.00

PHILADELPHIA—\$1,070

Anthony, Laurence, 20 S. Dewey St., Philadelphia. Transporting untagged deer	25.00
Arnold, Donald K., 114 E. Girard St., Philadelphia. Transporting parts of big game untagged	25.00
Barnes, Edward, 6831 Woodland Ave., Philadelphia. Transporting parts of big game untagged	25.00
Beaver, Stanley, 6505 Linmore Ave., Philadelphia. Failure to maintain complete roster	25.00
Blickley, Leo J., 582 Chenault St., Philadelphia. Lending hunting license to another	20.00
Briggs, James E., 6311 Carnation St., Philadelphia. Transporting parts of big game unmarked	25.00
Brouse, Harold R., 1023 Foulkrod St., Philadelphia. Transporting parts of big game unmarked	25.00
Brown, Jr., Elmer F., 5708 VanDyke, Phila. 24. Failure to maintain proper roster	25.00
Burns, Charles F., 2105 S. Bucknell St., Philadelphia 45. Killing doe deer in closed season	100.00
Clarency, Jr., Elwood H., 5039 Jackson St., Philadelphia. Hunting within 150 yds. of occupied building	25.00
Connor, Leonard R., 8338 Walker St., Philadelphia. Hunting in state park area	25.00
Crisconi, John P., 1555 S. Broad St., Philadelphia. Possessing loaded firearm in vehicle in motion on highway	25.00
Detweiler, John E., 6525 Rising Sun Ave., Philadelphia. Possessing loaded rifle in vehicle in motion on highway	25.00
Dietrick, Harry B., 9 Montgomery Ave., Philadelphia. Transporting parts of big game unmarked	25.00
Dolansky, Joseph J., 31 Queen St., Philadelphia. Hunting within 150 yds. of occupied building	25.00
Edwards, Walter J., 5311 Malcolm St., Philadelphia. Transporting parts of big game unmarked	25.00
Ferrara, Pasquale, 2437 S. 16th St., Philadelphia 45. Failure to report shooting accident causing injury to another	25.00
German, Gilbert R., 5634 Haddington St., Philadelphia. Failure to display license tag while hunting	20.00
Greller, Frank B., 2516 S. Bonaffon St., Philadelphia. Possessing loaded rifle in vehicle standing along highway	10.00
Hastings, Thomas R., 29 Marlborough Road, Upper Darby. Aiding to secure hunting license for person not entitled to same	20.00
Jameson, Robert O., Philadelphia. Failure to maintain complete roster of party hunting big game	25.00
Katona, Stephen, 435 Leverington Ave., Philadelphia. Possessing loaded gun in vehicle standing along highway	10.00
Kish, Joseph J., 31 Queen St., Philadelphia. Hunting within 150 yds. of occupied building	25.00

Kirkpatrick, Henry, 1011 Euclid Ave., Philadelphia. Hunting small game in party containing more than 5 persons	5.00
Kohlmeir, John L., 260 W. Clapier St., Philadelphia. Transporting parts of big game unmarked	25.00
Kremser, Harold R., 2317 W. Tioga St., Philadelphia. Transporting parts of big game unmarked	25.00
Long, Walter, 29 N. 34th St., Philadelphia. Transporting parts of big game unmarked	25.00
Lutsky, George M., 2129 Mt. Vernon St., Philadelphia. Transporting parts of big game unmarked	25.00
McCarter, William H., 5023 Bentrige St., Philadelphia. Transporting parts of big game unmarked	25.00
McGlade, Edward G., 717 Wainwright St., Philadelphia. Lending license to another	20.00
Melvin, Captain John G., 22 & Lehigh Ave., Philadelphia. Hunting deer without resident license	20.00
Nesbitt, Walter L., 2807 Stevens St., Philadelphia. Hunting within 150 yds. of occupied building	25.00
Pendleton, Joseph, 1629 N. 6th St., Philadelphia. Hunting small game in party of more than 5 persons	5.00
Pennise, Alfred, 751 S. Mildred St., Philadelphia. Hunting without resident license	20.00
Seamon, Stanley S., 1964 W. Sparks St., Philadelphia 41. Hunting safety zone	25.00
Stanisewski, Charles J., 7037 Cottage St., Philadelphia. Possessing loaded rifle in vehicle in motion on highway	25.00
Stowell, John W., 2549 E. Ontario St., Philadelphia. Possessing loaded rifle in vehicle in motion on highway	25.00
Thomas, Bruce R., 8142 Ardleigh St., Phila. Transporting parts of big game unmarked	25.00
Twitty, John, 7913 Laycox Ave., Philadelphia. Permitting dog to enter state game propagating area	25.00
VanHorn, George B., 2549 E. Ontario St., Philadelphia. Possessing loaded rifle in vehicle in motion on highway	25.00
Vilsmeyer, Frank J., 3900 Richmond St., Philadelphia. Transporting parts of big game unmarked	25.00
Williams, Earl, 722 N. 43rd St., Philadelphia. Possessing loaded rifle in vehicle	25.00
Wood, Oscar T., 461 Fairfax Road, Drexel Park. Aiding in securing license for person not entitled to same	20.00

PIKE—\$60.00

Brennan, Alfred, Greentown. Transporting parts of big game unmarked	25.00
Conry, Michael, Milford. Transporting parts of big game unmarked	25.00
VanWhy, Russel Carson, R. D., Dingmans Ferry. Possessing loaded rifle in vehicle standing along highway	10.00

POTTER—\$735

Bruzzi, Augustine R., 714 E. Main St., Coudersport. Hunting deer on Sunday; killing doe deer in closed season	125.00
Caldwell, Odell J., 202 Vine St., Coudersport. Hunting deer on Sunday; killing doe deer in closed season	125.00
DeStevens, Carmen J., 5 S. Main St., Coudersport. Hunting deer on Sunday; killing doe deer in closed season	125.00
Frith, Clifford A., 204 W. Main St., Galeton. Shooting within 150 yds. of occupied buildings	25.00
Frith, Lloyd A., 27 Poplar Ave., Galeton. Shooting within 150 yds. of occupied buildings	25.00
Gill, Gordon, 79 W. Main St., Galeton. Shooting within 150 yds. of occupied building	25.00
Glover, Richard G., R. D. No. 1, Austin. Failure to visit traps within 36 hours	10.00
Hicks, Roy B., P. O. Box 208, Genesee. Killing doe deer in closed season	100.00
Lannager, Kenneth E., E. Second St., Coudersport. Shooting within 150 yds. of occupied building	25.00
Schott, Edwin D., 21 Prospect Ave., Galeton. Shooting within 150 yds. of occupied building	25.00
Stilson, Jas. H., R. D. No. 2, Genesee. Killing doe deer in closed season	100.00
Van Horn, Wendell, c/o Box 95, Coudersport. Possessing loaded rifle in vehicle in motion along highway	25.00

SCHUYLKILL—\$965

Chevinsky, Jacob A., Sr., 20 N. Hancock St., McAdoo. Using illegal device to kill game animal	10.00
Delp, Samuel, 337 Hazel St., Tamaqua. Possessing loaded rifle in vehicle in motion along highway	25.00
Dougherty, Eugene J., Water St., Mahanoy Plane. Killing male deer not having 2 points to one antler	100.00
Heberling, Clarence A., 243 E. Main St., Tremont. Attempting to kill second deer in one season	100.00
Henninger, Wallace LeRoy, R. D. No. 3, Tamaqua. Possessing two skins of fur-bearing animal unlawfully killed	20.00
Horrox, Gordon Robert, Jr., Brandonville. Attempting to kill second big game animal; shooting within 150 yds. of occupied building	125.00
Hutton, John Oliver, Jr., 230 S. Broad Mtn., Frackville. Transporting parts of big game unmarked	25.00
Loch, Carl H., McKeensburg. Transporting parts of big game untagged	25.00
Lohmar, Walter A., R. D. No. 1, Pottstown. Killing a buck deer in closed season	100.00
Miller, Paul L., Ravine. Hunting deer between 5 P. M. & 7 A. M.	15.00
Murphy, George J., 401 West Broad St., Tamaqua. Possessing deer unlawfully taken	100.00
Murphy, Walter J., 101 Hunter St., Tamaqua. Possessing deer unlawfully taken	100.00
Nasatka, Eugene V., Dornsife. Transporting parts of big game untagged	25.00
Nunemacher, Harry E., R. D. No. 2, Pine Grove. Possessing loaded rifle in vehicle standing along highway	10.00
Patrick, Joseph T., Grand Ave., Reinerton. Possessing loaded rifle in vehicle standing along highway	10.00
Pearce, Thomas, 23 E. Lloyd St., Shenandoah. Shooting into live tree in big game season	10.00
Reed, Earl C., N. 4th St., Cressona. Transporting parts of big game unmarked	25.00
Smith, William M., 332 Valley St., Port Carbon. Transporting parts of big game unmarked	25.00

Snyder, Floyd G., R. D. No. 2, Pine Grove. Possessing loaded rifle in vehicle standing along highway	10.00
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SNYDER—\$375

Brungart, Oren B., Park Road, Hummels Wharf. Possessing loaded rifle on vehicle standing along highway	10.00
Kerstetter, Earl M., Box 36, Paxtonville. Assisting to conceal and transport illegally killed deer	100.00
Mengel, Stanton J., Mt. Pleasant Mills. Killing spike buck in closed season	100.00
Metzger, Russell S., R. D. No. 1, Selinsgrove. Hunting rabbits with shotgun containing more than 3 shells	10.00
Nornhold, Jacob H., R. D. No. 1, Middleburg. Possessing loaded rifle on vehicle standing along highway	10.00
Shultz, Albert W., R. D. No. 2, Selinsgrove. Possessing loaded rifle in vehicle while standing on highway	10.00
Steffen, Stanley E., Middleburg. Killing doe deer in closed season	100.00
Wagner, Edward W., R. D. No. 1, McClure. Shooting at target more than 200 yds. from camp	10.00
Walter, Harold H., Penns Creek. Hunting in special wildlife refuge	25.00

SOMERSET—\$1,150

Bednar, Joseph J., Central City. Transporting parts of game unmarked	25.00
Berkey, Leroy E., R. D. No. 1, Central City. Failure to display license tag while hunting	20.00
Berndt, Rudolph H., R. D. No. 1, Hollsopple. Failure to maintain complete roster	25.00
Burke, Jr., George S., 316 Meyers Ave., Meyersdale. Unlawfully removing dead deer from state game refuge	100.00
Dobson, Glen L., R. D. No. 1, Windber. Possessing parts of deer unlawfully taken	100.00
Fisher, Teddy R., 221 Ohio St., Boswell. Possessing skin of fur-bearing animal unlawfully killed	10.00
Frazier, Wilmer C., R. D. No. 1, Central City. Hunting without resident license	20.00
Fritz, Albert J., R. D. No. 5, Somerset. Transporting untagged deer	25.00
Galish, William G., Box 172, Central City. Possessing loaded rifle in vehicle standing on highway	10.00
Higgins, Fred B., Sipesville. Possessing loaded shotgun in vehicle standing on highway	10.00
Koot, Joseph S., R. D. No. 1, Windber. Possessing loaded shotgun in vehicle standing along highway	10.00
Kreger, Harry Clark, R. D. No. 1, Markleton. Assisting to transport two deer taken in closed season	200.00
Lane, Harry C., 329 S C Ave., Somerset. Failure to produce head of deer on demand of officer	100.00
Lapinsky, James, 810 17th St., Windber. Shooting within 150 yds. of occupied building	25.00
Leister, Elwood H., Fairhope. Transporting parts of big game unmarked	25.00
Phillippi, Fred, Box 25, Markleton. Transporting parts of big game unmarked	25.00
Kerch, Mike, 213 Juniata St., Boswell. Possessing rabbit taken in closed season; taking one muskrat in closed season	20.00
Pizer, Albert F., R. D. No. 3, Stoystown. Failure to produce roster of party hunting big game	25.00
Sab, John, 750 Mine 37, Windber. Hunting small game in party of more than 5 persons	5.00
Sechler, Earle J., R. D. No. 3, Confluence. Possessing two deer taken in closed season	200.00
Shaffer, Donald L., Jefferson Ave., Windber. Hunting small game in party of more than five persons	5.00
Shaffer, Francis, R. D. No. 1, Windber. Hunting small game in party of more than 5 persons	5.00
Tallion, Andy J., 1208½ Somerset Ave., Windber. Hunting small game in party of more than 5 persons	5.00
Thomas, Floyd R., Box 127, Acosta. Possessing loaded rifle in vehicle standing along highway	10.00
Troutman, Floyd E., Hundman, R. D. No. 1. Failure to stop motor vehicle on signal of Game Protector	10.00
Washko, Jr., John H., No. 16, Rockingham. Transporting untagged deer	25.00
Witt, Curtis C., Wellersburg. Killing doe deer in closed season ..	100.00
Yachovitz, Jr., Thomas, Box 127, Cairnbrook. Failing to tag deer within 1 hour after killing	10.00

SULLIVAN—\$110

Shaffer, William B., R. D. No. 2, Dushore. Possessing one doe deer in closed season	100.00
Snyder, Russell S., Laporte. Shooting at unprotected target in big game season	10.00

SUSQUEHANNA—\$570

Abbott, Paul R., Rushville. Killing second deer in one season ..	100.00
Bates, William P., R. D. No. 2, Little Meadows. Possessing skins of fur-bearing animals unlawfully killed	60.00
Becher, Frank W., R. D. No. 2, Uniondale. Failure to produce roster of party hunting big game	25.00
Brink, Clarence L., R. D. No. 1, Great Bend. Shooting at antlerless deer in closed season	100.00
Harvey, Howard F., R. D. No. 3, Meshoppen. Possessing skins of two fur-bearing animals unlawfully killed	20.00
Kamiski, John, Jr., Gibson. Failure to report shooting accident causing injury to another	25.00
Lewis, William C., New Milford. Shooting at random in big game season	10.00
McManus, Paul T., R. D. No. 1, Birchardsville. Possessing skins of fur-bearing animals unlawfully killed; Failure to tag trap	30.00
Noseworthy, Lawrence, 48 High St., Montrose. Alien possessing shotgun	25.00
Pennay, Gaylord M., R. D. No. 1, Kingsley. Possessing parts of deer unlawfully taken	100.00
Stager, Lloyd R., Pine Grove, R. D. No. 1. Taking 4 muskrats in closed season	40.00
Susla, John, R. D. No. 4, Montrose. Transporting parts of big game unmarked	25.00
Sweet, Robert I., Box 27, Gibson. Failure to report shooting accident causing injury to himself	25.00
Very, Henry I., Fairdale. Transporting parts of big game unmarked ..	25.00

Webber, Edwin, Box 185, Auburn. Transporting parts of big game unmarked	25.00
Whalen, William J., Jr., 419 Catherine St., Fountain Springs. Possessing skins of furbearing animals unlawfully taken	20.00
Willard, William H., 322 St. Nicholas St., St. Clair. Shooting in state park	25.00
Woytokoucze, Mike J., 403 W. Washington St., Shenandoah. Shooting into live tree in big game season	10.00
Zehner, Russell C., 514 W. Market St., Orwigsburg. Possessing loaded rifle in vehicle standing on highway	10.00

TIOGA—\$610

Cowan, Franklin N., R. D. No. 2, Covington. Hunting while hunting rights have been denied	40.00
Fritz, William, Elkland. Using game unlawfully killed	100.00
Fuller, Burdette E., R. D. No. 2, Wellsboro. Hunting ducks without plug in shotgun	10.00
Furman, Orrin J., R. D. No. 2, Snedekerville. Possessing parts of doe deer in closed season	100.00
Heater, Melvin W., R. D. No. 2, Mansfield. Lending hunting license to another	20.00
Hopkins, Jesse H., R. D. No. 2, Mansfield. Possessing parts of doe deer in closed season	100.00
Main, Edward J., Box 506, Elkland. Possessing loaded rifle in vehicle standing along highway	10.00
Mascho, Darel H., R. D. No. 2, Westfield. Failure to produce head of deer upon demand	100.00
Stevens, Lewis D., R. D. No. 2, Mansfield. Possessing parts of deer in closed season	100.00
Wood, Charles G., R. D. No. 2, Mansfield. Failure to stop vehicle upon signal of Game Protector; Hunting without resident license	30.00

UNION—\$110

Ard, Wilson P., R. D. No. 2, Lewisburg. Possessing loaded rifle in vehicle standing along highway	10.00
Beckley, Thomas H., 201-5th St., Mifflinburg. Killing spike buck in close season	100.00

VENANGO—\$10.00

Myers, Robert C., 127 Maple St., Franklin. Possessing loaded rifle in vehicle standing along highway	10.00
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WASHINGTON—\$650

Davey, Neil G., Box 261, Vestaburg. Shooting at unprotected target in big game season	10.00
Dille, George M., Dunns Station, R. D. No. 1. Hunting deer after killing camp limit	100.00
Domske, Rennold W., R. D. No. 1, Washington. Killing bear in closed season	200.00
Ealy, James F., R. D. No. 4, Washington. Attempting to collect bounty on fox by giving false date of killing	10.00
Fetch, Carl, Union Valley, New Eagle. Possessing loaded rifle in vehicle standing along highway	10.00
Hefner, Elizabeth, R. D. No. 1, Burgettstown. Hunting without resident license	20.00
Hess, Howard F., R. D. No. 1, Bentleyville. Possessing deer in closed season	100.00
Littleton, Curtis, 1146 McKean Ave., Donora. Possessing loaded rifle in vehicle standing along highway	10.00
Miller, Therman J., Marianna. Transporting untagged deer	25.00
Nickolas, Edward G., Box 323, Millsboro. Shooting within 150 yds. of occupied building	25.00
Rosenberg, Harold L., 415 Fallowfield Ave., Charleroi. Possessing skins of two muskrats unlawfully taken	20.00
Rozmus, John A., Box 52, Slovan. Attempting to kill doe in closed season	100.00
Scariot, Jr., Angelo, Box 153, Joffre. Failure to display license tag while hunting	20.00

WAYNE—\$185

Brill, Lawrence H., Star Route, Honesdale. Shooting at random in big game season	10.00
Cavage, Anthony M., R. D. No. 2, Waymart. Failure to display license tag while hunting	20.00
Kowalczyk, Joseph E., R. D. No. 2, Honesdale. Hunting without resident license	20.00
Leonard, Gerald B., Lakewood. Transporting parts of big game unmarked	25.00
Naroski, Chester P., R. D. No. 2, Thompson. Killing male deer not having two points to one antler	100.00
Romyn, Jacob W., 622 Ridge St., Honesdale. Possessing loaded rifle in vehicle standing along highway	10.00

WESTMORELAND—\$560

Albert, Jr., Russell A., Box 222, Irwin. Hunting without resident license	20.00
Arnold, Harold I., 445 4th Ave., New Kensington. Possessing loaded rifle in vehicle standing along highway	10.00
Baker, Carl E., R. D. No. 2, New Kensington. Possessing loaded rifle in vehicle standing along highway	10.00
Baum, Arthur J., Route 1, Ligonier. Possessing loaded rifle in vehicle standing along highway	10.00
Bitens, Adolph V., Box 684, Export. Possessing loaded rifle in vehicle standing on highway	10.00
Bitens, John F., Box 684, Export. Possessing loaded rifle in vehicle standing on highway	10.00
Borland, Harold L., 1158 4th Ave., New Kensington. Possessing loaded rifle in vehicle standing along highway	10.00
Brentzel, Jr., Jake, R. D. No. 2, Irwin. Discharging a shotgun within 150 yards of occupied building	25.00
Chipoletti, Frank, 1945 Leishman Ave., New Kensington. Shooting across highway while hunting game	25.00
Clingerman, Addison B., 123 McKee Ave., Monessen. Possessing loaded rifle in vehicle in motion on highway	25.00
Cunnard, Jr., John J., Box 68, Tarrs. Failure to produce roster as required	25.00
Daniska, Stephen M., 324 Quay St., Box 324, Vandergrift. Possessing loaded shotgun in vehicle standing along highway	10.00
Echard, Lawrence G., R. D. No. 3, Mt. Pleasant. Setting steel trap in mouth of hole	10.00
Eisaman, Paul, R. D. No. 5, Greensburg. Hunting without resident license	20.00
Greenawalt, Cecil W., R. D. No. 1, West Newton. Taking two muskrats in close season	20.00

Grimm, Curtis H., 306 Maple St., Everson. Failure to tag deer within 1 hour after killing	10.00
Johnson, Merle A., R. D. No. 1, New Stanton. Possessing loaded rifle in vehicle standing along highway	10.00
Johnson, William, R. D. No. 2, Box 136, New Kensington. Attempting to take small game in close season	10.00
Kessler, Andrew J., 1209 Ligonier St., Latrobe. Hunting without resident license	20.00
Kissell, Raymond, R. D. No. 1, Mt. Pleasant. Attempting to take muskrat in close season	10.00
Knappenberger, Murry O., R. D. No. 2, Leechburg. Failure to tag two traps	20.00
Komarinski, Paul, Route 3, Greensburg. Possessing loaded rifle in vehicle standing along highway	10.00
Koontz, James H., R. D. No. 2, New Alexandria. Hunting without resident license	20.00
Kroll, William, Box 21, Lowber. Attempting to take muskrat in close season	10.00
Kuhns, Robert M., Cherry Way, Ligonier. Failure to stop motor vehicle upon signal from Game Protector	10.00
Leonard, Thomas H., Box 127, Adamsburg. Attempting to collect bounty on one gray fox by giving false date of killing	10.00
Marks, Sr., John O., R. D. No. 1, Latrobe. Removing deer from place killed without tagging same	10.00
Martini, Ferris A., Box 89, Yukon. Aiding in securing hunting license for persons not entitled to same	20.00
Mazero, John, 121 Miller St., Latrobe. Failure to tag deer before transporting	10.00
Mellon, Emmett N., Box 6, Manor. Lending hunting license to another	20.00
Shafren, Steve, Bagdaley. Failure to tag deer within 1 hour after killing	10.00
Taylor, Clair C., Box 2 Pleasant Unity. Killing doe deer in close season	100.00
Uhrin, Richard M., P. O. Box 28, Norvelt. Possessing loaded rifle in vehicle standing along highway	10.00

WYOMING—\$90.00

Billings, Wesley J., N. Mehoopany. Issuing hunter's license without satisfactory identification	20.00
Marple, John Jr., R. D. No. 1, Meshoppen. Hunting without resident license; transporting untagged deer	45.00
Skinner, Benjamin S., 13-17 Putnam St., Tunkhannock. Shooting at deer within 150 yds. of occupied building	25.00

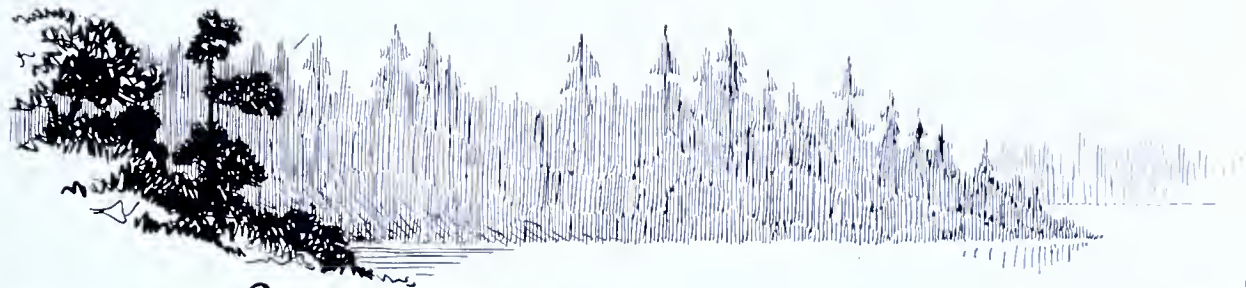
YORK—\$315

Bange, Clair J., 815 Broadway, Hanover. Hunting rabbits between 5 P. M. & 7 A. M.	15.00
Billet, Chas., 673 Edison St., York. Camping on state game lands	25.00
Crone, Sylvester R., Box 46, Wellsville. Possessing loaded rifle in vehicle standing along highway	10.00
Dehoff, Leo C., R. D. No. 1, Dallastown. Possessing loaded rifle in vehicle standing along highway	10.00
Dietz, John L., R. D. No. 1, New Cumberland. Possessing loaded rifle in vehicle standing along highway	10.00
Frey, Elias E., R. D. No. 1, Windsor. Hunting without resident license	20.00
Grim, Wilbur E., 339 E. King St., York. Hunting between 5 P. M. & 7 A. M.	15.00
Hendrickson, Vernon A., Loganville. Hunting game on state game area	25.00
Holtzapfel, Harris F., R. D. No. 3, Red Lion. Hunting without resident license	20.00
Hcstetler, Frank, 329 Cumberland Ave., York. Failure to post roster as required	25.00
Igenfritz, Earl L., R. D. No. 9, York. Hunting rabbits with shotgun containing more than 3 shells	10.00
Jenkins, Jr., Marvin D., Glenn Rock. Shooting within 150 yds. of occupied bldg	25.00
Kauffman, Bernard S., Rt. 1, Manchester. Possessing loaded rifle in vehicle standing along highway	10.00
King, Howard, Rt. 5, York. Killing second deer in one season	100.00
Markle, Raymond E., Sanford Ave., Hanover. Staking out muskrat traps prior to opening season	10.00
Miller, Ruth M., 3 Baltimore St., Hanover. Hunting without resident license	20.00
Morgan, Lloyd R., R. D. No. 1, Red Lion. Throwing artificial light upon deer while in possession of firearm	100.00
Myers, Robert B., 111½ High St., Hanover. Hunting rabbits between 5 P. M. & 7 A. M.	15.00
Shultz, Philip E., 1725 Stanton St., York. Possessing loaded rifle in vehicle standing along highway	10.00
Simpson, Kenneth H., 611 Frederick St., Hanover. Staking out traps for muskrats before season	50.00
Smeltzer, Carl E., Red Lion, R. D. No. 3. Possessing loaded rifle in vehicle standing along highway	10.00
Stern, Roy C., Glen Rock, R. D. No. 1, failing to tag deer before moving it from place killed	10.00
Stevenson, Norman William P., 562 Atlantic Ave., York. Possessing loaded rifle in vehicle standing along highway	10.00
Strickler, Arthur A., 125 E. King St., York. Possessing loaded shotgun in vehicle along highway	10.00
Strickler, Stuart E., R. D. No. 9, York. Possessing male deer unlawfully taken; killing male deer in close season	200.00
Toot, Reed J., 901 York St., Hanover. Possessing muskrat pelt in close season	10.00
Trone, William E., 1011 E. Walnut St., Hanover. Staking out traps before the opening season for muskrats	10.00
Wallace, Daniel N., R. D. No. 3, Dover. Hunting without resident license	20.00

NON-RESIDENTS—\$9370

Ahlgren, Robert H., 14 Sixth Ave., Roebbing, N. J. Trapping without non-resident license	50.00
Aletter, William, 58 W. Broadway, Long Beach, N. Y. Killing button buck deer in close season	100.00
Altrath, Robert L., 23 Breckenridge Terrace, Irvington, N. J. Hunting without non-resident license	50.00
Arasz, George H., 99 Berry St., Brooklyn, N. Y. Attempting to transport game animal out of state	100.00
Barthol, Fred O., R. D. No. 2, Atwater, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Bauer, Carl, R. F. D., Readington Rd., Whitehouse, N. J. Hunting without non-resident license	50.00

Beaupe, Roland R., 17 Second St., Wayland, N. Y. Hunting without non-resident license	50.00	Henderson, Charles W., 2101 A. S. U., Fort Meade, Md. Hunting without non-resident license	20.00
Bedeski, Joseph A., 711 Adams St., Hoboken, N. J. Hunting without non-resident license	50.00	Henry, James P., 513 Pfeiffer St., Camden, N. J. Possessing loaded rifle in vehicle standing along highway	10.00
Benevento, Jr., Nicholas, Hadden Ave., W. Berlin, N. J. Transporting untagged deer	25.00	Hill, Elvin E., Newton, N. J. Hunting one day without non-resident license	50.00
Berryman, Vernon V., 132 Bayview Ave., Jersey City, N. J. Possessing deer taken in closed season; concealing deer unlawfully taken	200.00	Hochman, Elvin, c/o Harold Featherman, R. D. No. 2, Philippsburg, N. J. Hunting without non-resident license	50.00
Berta, John T., 47 W Main St., Bound Brook, N. J. Transporting parts of big game unmarked	25.00	Howard, Joseph G., 5606 Linwood Ave., Cleveland, Ohio. Making false statement to secure hunters license; Possessing loaded rifle in vehicle in motion on highway; Hunting one day without non-resident license	95.00
Bishman, Jerome C., 12 Chatham St., Norwalk, Ohio. Transporting parts of big game unmarked	25.00	Jelde, George W., Forty Washington Blvd., Roslyn, N. Y. Transporting parts of big game unmarked	25.00
Board, Francis L., 2101 E. 96th St., Cleveland, Ohio. Transporting parts of deer unmarked	25.00	Johnson, Roy C., 56 Farr Ave., Johnson City, N. Y. Transporting parts of big game unmarked	25.00
Borland, James H., 255 Nickelson, Lakewood, Ohio. Transporting parts of deer unmarked	25.00	Johnston, Alfred C., 3443 W. 58th St., Cleveland, Ohio. Transporting parts of big game unmarked	25.00
Bowers, Ray H., Adamsville, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00	Keith, Robert W., 444 Cambridge Ave., Buffalo, N. Y. Hunting without non-resident license	50.00
Braen, Samuel, 339 Wyckoff Ave., Wyckoff, N. J. Possessing loaded rifle in vehicle standing along highway	10.00	Kerr, Logan, 126 Elm Ave., Rockway, N. J. Shooting within 150 yds. of occupied building	25.00
Brantsch, G. J., 5088 E. 114 St., Garfield 25, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00	Kimmerly, Roy L., Norris St., Mantua, N. J. Hunting without non-resident license	50.00
Bricka, Albert H., Pioneer Trailer Park, Horseheads, N. Y. Hunting without non-resident license	50.00	King, Elizabeth Mary, 421 N. Main St., Pleasantville, N. J. Hunting without non-resident license	50.00
Brockschmidt, Donna M., School St., Luckey, Ohio. Failure to tag deer within 1 hour after killing	10.00	Koerner, Arthur, 10 Hall St., Lawrence, Mass. Failure to maintain a complete roster while hunting big game	25.00
Brown, Gregory B., 56 Chews Landing Road, Clementon, N. J. Attempting to kill a second deer in one season	100.00	Kozelski, Charles, 575 Gridley St., Akron, Ohio. Possessing loaded rifle in car in motion along highway	25.00
Brown, William H., 3900 Ridgewood Ave., Baltimore, Md. Possessing an antlerless deer taken in closed season	100.00	Kucinic, Michael J., 10617 Elmwood, Garfield Heights, Ohio. Possessing loaded rifle in car standing on highway	10.00
Brown, Jr., W. H., 3900 Ridgewood Ave., Baltimore, Md. Hunting without non-resident license	50.00	Lambert, Grover C., 69-69th St., Guttenberg, N. J. Transporting parts of large game unmarked	25.00
Buck, Chas. W., 2413 Bethel Rd., Columbus, Ohio. Assisting in killing doe deer in close season	100.00	Lance, Bruce A., 566 Vanderbilt Ave., Brooklyn, N. Y. Transporting parts of big game unmarked	25.00
Buck, Clement M., 2413 Bethel Rd., Columbus, Ohio. Assisting in killing deer in close season	100.00	Lanning, Robert J., R. D. No. 1, Kansas, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Buck, Wesley L., 2041 Henderson Rd., Columbus, Ohio. Killing doe deer in close season	100.00	Lewis, John E., 12 Lexington Ave., Staten Island, N. Y. Hunting without non-resident license; Aiding in securing license for one not entitled to same	770.00
Burkholder, Wilmer R., 1917 Utew Place, Baltimore, Md. Hunting without non-resident license	50.00	Logan Jr., George S., 82 Riverside Ave., Roebing, N. J. Hunting without non-resident license	50.00
Bussard, James B., 821 Banks, E. Liverpool, Ohio. Transporting parts of deer unmarked	25.00	Logeston, Robert L., Flintstone, R. D. No. 1, Md. Assisting to conceal game unlawfully killed	100.00
Chubrick, Stephen, 171 Manville Homes, Manville, N. J. Transporting parts of big game unmarked	25.00	Long, John B., R. D. No. 1, Grand Rapids, Ohio. Killing doe deer in close season	100.00
Clapper, Lynn M., 421 Hood Place, Ithaca, N. Y. Transporting parts of big game unmarked	25.00	Luls, Frank J., Moneta Ave., Geauga Lake, Ohio. Hunting without non-resident license	50.00
Clark, Jack S., 239 Superior St., Newton Falls, Ohio. Hunting deer within state game refuge	100.00	Malott, Alvena C., 1039 McKinley St., Fremont, Ohio. Killing spike buck in close season	100.00
Chelgren, W. J., 19 Rock City Rd., Olean, N. Y. Possessing deer taken in close season	100.00	Martin, Henry, 22 N. Leonard St., Waterbury, Conn. Possessing loaded rifle in vehicle standing along highway	10.00
Cody, Chas., 369 Berkley Rd., Columbus, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00	Manson, Paul B., 3039 Lincoln Way W., Massilola, Ohio. Transporting parts of big game unmarked	25.00
Corbett, Richard C., Main & Ryerson St., Bloomingdale, N. J. Hunting without non-resident hunting license	50.00	McComas, Ernest, 2040 E. Seventy-Ninth St., Cleveland, Ohio. Making false statement to secure hunters license; Possessing loaded rifle in vehicle in motion on highway; Hunting without non-resident license	95.00
Dalinsky, Jacob John, 66 Holmes Ave., Waterbury, Conn. Hunting without non-resident license; making false statement to secure license	70.00	McKenzie, William C., 319 2nd St., Waverly, Iowa. Hunting without non-resident license	50.00
Dalinsky, John C., Y. M. C. A., Naugatuck, Conn. Making false statement to secure hunting license; hunting without non-resident license	70.00	Melson, John L., Bridgeton Pike, Mantua, N. J. Possessing loaded firearm in vehicle standing along highway	10.00
Damminger, Rudolph, Sewell, N. J. Attempting to take deer from vehicle; possessing loaded firearm in vehicle standing along highway	110.00	Michaloski, Charles P., 456 Burkhardt Ave., Williston Park, Long Island, N. Y. Transporting parts of big game unmarked	25.00
Datz, James, Richwood, N. J. Attempting to take second deer in one season	100.00	Miller, Herbert A., 18-6th Ave., Roebing, N. J. Transporting parts of big game unmarked	25.00
De Wolf, Loren L., 45 Meadowbrook Rd., Chatham, N. J. Hunting without non-resident license	50.00	Miller, Mill R., Imperial Road 19510, Detroit, Mich. Making false statement to secure hunting license	20.00
Dorn, James E., 358 W. Mithoff St., Columbus, Ohio. Killing doe deer in close season	100.00	Miller, Robert W., Jr., 1313 Forest Rd., Sparrows Point, Baltimore 19, Md. Making false statement to secure hunting license; Hunting without non-resident license	70.00
Dutter, Howard, 239 Floral St., Johnson City, N. J. Transporting parts of big game animal unmarked	25.00	Montross, Samuel R., Main Road, Vernon, N. J. Killing male deer in close season	100.00
Eckman, Jr., Lawrence E., Quarters "I," West Potomac Park, Washington 4, D. C. Hunting without non-resident license; hunting game between 5 P. M. & 7 A. M.	65.00	Moore, Charles W., 1353 Pondview Ave., Akron, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Eisenhauer, Karl, 508 Fariview Terrace, Ridgefield, N. J. Hunting without non-resident license	50.00	Mroz, Tadeuss, 317 3rd St., Saddle River Twp., N. J. Assisting to transport game taken in close season; Possessing male deer taken in close season	200.00
Farber, Ora Lynn, Vernon, N. J. Possessing male deer taken in close season	100.00	Mulvey, Joseph H., 460 Huntingdon St., New Haven, Conn. Hunting without non-resident license	50.00
Flick, Wayne B., 401 Washington St., Findlay, Ohio. Transporting big game unmarked	25.00	Musso, Patsy B., 61½ Garfield Ave., Endicott, N. Y. Transporting parts of big game unmarked	25.00
Forbes, Howard, R. D. No. 2, Waverly, N. Y. Transporting untagged deer	25.00	Nicolette, Nicholas A., 50 Michael St., Belvidere, N. J. Possessing three doe deer in close season	300.00
Foti, Anthony J., 400 Highland Ave., Passaic, N. J. Possessing three doe deer in close season	300.00	Nicolette, Salvatore, 15 Duncan Place, Nutley, N. J. Possessing three doe deer in close season	300.00
Franks, Harry Gus, 20301 Tracy Ave., Euclid, Ohio. Possessing male deer taken in close season	100.00	Novak, Captain Emil, Seneca Ordnance Depot, 655 Squadron, Romulus, N. Y. Hunting without non-resident license	50.00
Frost, Jr., Cornelius W., 29 E. Arkport, N. Y. Attempting to kill second deer in one season	100.00	Osgood, Roland L., 225 E. St., Buffalo, N. Y. Possessing male deer taken in close season	100.00
Fusaro, James, 182 Passaic Ave., Belvidere, N. J. Possessing three doe deer in close season	300.00	Ott, Weaver L., Rossner Ave., Hagerstown, Md. Shooting at target more than 200 yds. from camp	10.00
Gallager, Lisle C., R. D. No. 1, Wellsville, Ohio. Transporting parts of deer unmarked	25.00	Pancoast, Earl B., Hancock Bridge, N. J. Shooting within 150 yds. of occupied building	25.00
Gearhart, Otis E., R. D. No. 1, Edon, Ohio. Camping on state game lands	25.00	Purdy, Charles E., R. D. No. 1, Howard, Ohio. Possessing loaded rifle in vehicle in motion along highway	25.00
Gersin, Anton, 980 E. 229 St., Euclid, Ohio. Assisting in killing deer in close season	100.00	Radcliffe, Delbert P., Adamsville, Ohio. Possessing loaded rifle in vehicle standing along highway	10.00
Gott, Cecil A., R. D. No. 1, Hyattsville, Md. Hunting without non-resident license	50.00	Ray, Jerry J., 738 Broad St., Gibbstown, N. J. Failure to stop vehicle upon signal	10.00
Hague, Richard L., 12 Fifth Ave., Roebing, N. J. Hunting without non-resident license	50.00	Reiser, Joseph, Stinhaus Lane, Wyckoff, N. J. Transporting parts of big game unmarked	25.00
Haines, Henry D., Vernon, N. J. Possessing male deer taken in close season	100.00	Rhubert, Donald E., Hancock Bridge, N. J. Shooting within 150 yds. of occupied bldg.	25.00
Hamas, Steven Vincent, 73 Manchester Road, Tuckahoe, N. Y. Hunting one day without non-resident license	50.00	Roach, Douglas A., 354 Hunter St., Battle Creek, Mich. Failure to stop motor vehicle upon signal of Game Protector	10.00
Hamsher, Charles W., Dansville, N. Y. Possessing loaded rifle in car in motion along highway	25.00	Roberts, Norman E., 583 Neward Ave., Kenilworth, N. J. Transporting untagged deer	25.00
Hansen, Raymond L., 843 West Eight St., Livermore, Calif. Hunting one day without securing non-resident license	50.00	Ruwitten, William, 143 Perry St., New York, N. Y. Transporting parts of big game unmarked	25.00
Hartline, Burles C., 1275 Cedar Rd., Cleveland, Ohio. Possessing loaded rifle in car in motion along highway	25.00	Sakers, Floyd E., 1614 Ingle Side Ave., Baltimore, Md. Assisting to conceal game unlawfully killed	100.00
Hastings, Edward J., Jr., Georgetown, Delaware. Hunting without non-resident license 3 days	150.00	Sakers, Warren L., 1614 Ingle Side Ave., Baltimore 7, Md. Assisting to conceal game unlawfully killed	100.00
Hastings, John William, Georgetown, Delaware. Hunting without non-resident license 3 days	150.00		



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THE STORY BEHIND THE COVER



With the knowledge that native bunnies are best for Pennsylvania, the Game Commission has for 12 years included in its wildlife management program the live-trapping and transfer of cottontail rabbits within its borders.

Since 1938, when a state-wide trapping program was started, almost half a million of these popular game animals have been removed from city parks, institutional grounds, nurseries, orchards, and urban areas and released in areas open to public hunting or to propagation sites and refuges where the lively cottontails would spread out to good game cover. This month in areas where no hunting is permitted and a potentially valuable wildlife resource is plentiful, Game Commission trapping agents are concluding another season with their box traps.

This popular program is carried on under the direct supervision of Pennsylvania Games Protectors, men like L. L. Logan, of Manor, shown on this month's cover with two of his Boy Scout trappers from Troup-3, Latrobe—Clarence Smith, left, and Albert Harmon, right. Each year these officers appoint a group of helpers from the ranks of sportsmen, Boy Scouts, and other youth groups

in their districts and instruct them in rabbit trapping, supply the traps, and arrange for the collection of trapped bunnies. They are paid seventy-five cents for each rabbit caught and turned over to the Protector for release but as any rabbit trapper can testify, it is money well-earned. The guardians of the green boxes must tour their trap-lines at least once a day and occupational hazards include not only cold, wet weather, but, also, possible encounters with the odors of skunks and the bites of other small animals which occasionally get into the traps by mistake.

The rabbit trapping program typifies wise use of a valuable resource. Transferring rabbits from urban areas where they may do considerable damage to home gardens and shrubbery is a double blessing because it protects the home owner and benefits the sportsmen. Moreover, the program also involves considerable financial and educational benefits for those who participate in the trapping—Boy Scouts, 4-H Clubs, and other youth groups gaining added income for their treasuries as well as increasing their knowledge of the outdoors and the wildlife heritage that is theirs. The program also results in more and better hunting for Pennsylvania sportsmen.

THE WISE MANAGEMENT OF WILDLIFE BRINGS BENEFITS TO ALL!

PENNSYLVANIA Game News



APRIL 1950

TEN CENTS



The GAME NEWS

WILLARD T. JOHNS, JR.
Editor



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COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR

★

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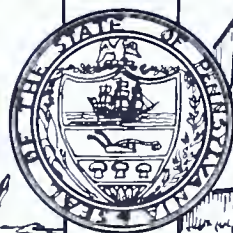
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Education - Conservation Challenge

For too many people, conservation is still a word of mystery and confusion. Like democracy, more people talk about conservation today than ever before, but not enough people really appreciate its need or practice it.

Mention conservation to the average person and the chances are that the rejoinder will involve hunting or fishing. To some the word means only the preservation of wild flowers or the saving of a bird or, even, the protection of a last stand of virgin timber. Conservation's meanings in the minds of men are many—all the way from saving, preserving, and protecting to restoring, stocking, and harvesting.

By definition conservation is simply "using a natural resource wisely." In practice it is as complicated and complex as the balance of nature. Wise management of the resources themselves is no longer the great and crying problem. Today, the key to good conservation lies in the management of human populations. Simply stated, what might be good conservation to one man might also be sinful waste to another. Whether it be the harvest of deer, the control of predators, or the purification of water, there is too much confusion in human viewpoints.

Conservation, therefore, relies in great part on human tolerance and judgment. It is essential that the principle of the "greatest good for the greatest number" must be placed ahead of the interests of a selfish few. Unfortunately, tolerance is an intangible value—incapable of being legislated, enforced, or dictated. It must be accomplished and can only be realized through education.

Today the need for wise use of our natural resources is greater than ever before. In the future it will be even more important. Almost too late, we have been forced into the realization that soils, waters, forests, and wild-life determine our national economy—our American way of life. These resources must be managed on a practical, tolerant, and eternal basis.

The success of such management, however, depends almost entirely on the understanding and sympathetic cooperation of all Americans in all walks of life. It must be attained through education. Conservation fundamentals must be taught to the young and the old, to the hunter, fisherman, businessman, housewife, tradesman, and farmer alike. They must be taught in our schools, re-echoed from our pulpits, headlined in our newspapers, and finally, practiced in our own backyards.

The need for conservation education is great because the very life of this and future generations depends on conservation. The challenge of its potentialities is the most powerful token of our time!

GOING—GOING—GONE

By Cory Ford

Reprinted by Special Permission of the Editor from Collier's Magazine,
April 23, 1949

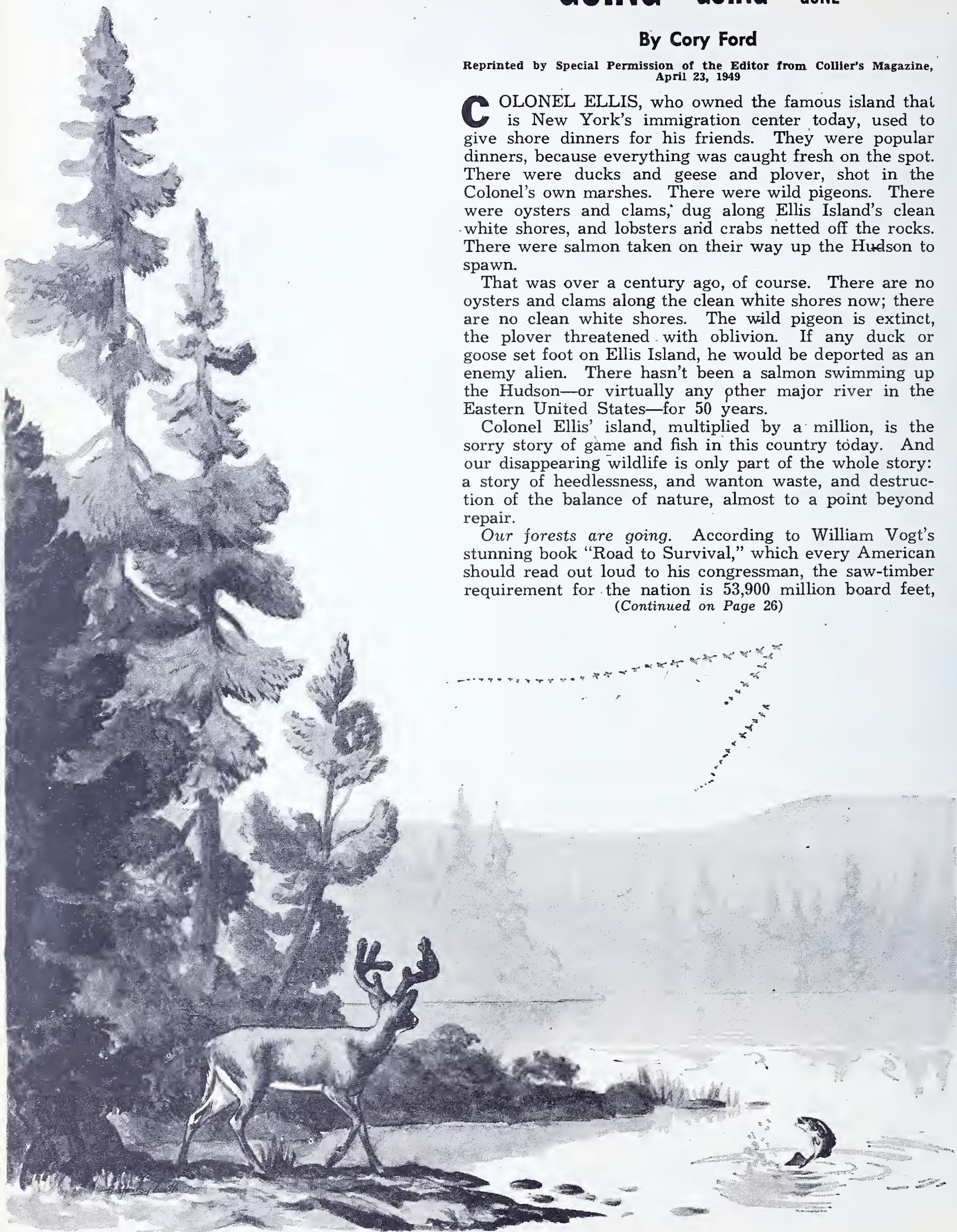
COLONEL ELLIS, who owned the famous island that is New York's immigration center today, used to give shore dinners for his friends. They were popular dinners, because everything was caught fresh on the spot. There were ducks and geese and plover, shot in the Colonel's own marshes. There were wild pigeons. There were oysters and clams, dug along Ellis Island's clean white shores, and lobsters and crabs netted off the rocks. There were salmon taken on their way up the Hudson to spawn.

That was over a century ago, of course. There are no oysters and clams along the clean white shores now; there are no clean white shores. The wild pigeon is extinct, the plover threatened with oblivion. If any duck or goose set foot on Ellis Island, he would be deported as an enemy alien. There hasn't been a salmon swimming up the Hudson—or virtually any other major river in the Eastern United States—for 50 years.

Colonel Ellis' island, multiplied by a million, is the sorry story of game and fish in this country today. And our disappearing wildlife is only part of the whole story: a story of heedlessness, and wanton waste, and destruction of the balance of nature, almost to a point beyond repair.

Our forests are going. According to William Vogt's stunning book "Road to Survival," which every American should read out loud to his congressman, the saw-timber requirement for the nation is 53,900 million board feet,

(Continued on Page 26)



Conservation From A National Viewpoint

By Michael Hudoba

CONSERVATION of the nation's resources is still in the infant stage. The major problem to aid in its growth is to get the correct story across to the public.

Another generation is maturing and it is to this generation that the appeal must be made.

They are the ones who must be reached to help save our resources, to build legislative and administrative supports for progress designed to continue and restore the resources. An appeal must be made to their consciences.

The generations that are destined to enter a world of expanding populations, pressuring overtaxed resources, must be prepared for conservation-restoration as one of their basic educational factors.

An informed public aroused to the urgency of conservation need can help to realize constructive laws expanding conservation effort. Such a public can give impetus to progressive administration to form conservation programs and can pave the way to bring preservation education into school curricula. Finally, this understanding of the problem would create the urge to realize and practice conservation.

There is much room for pioneering. Unfortunately too much effort has been expended in treating the symptoms of resource waste and abuse, and not enough importance placed on treatment of the cause. The problem of the natural sequence, which is the restoration of renewable resources, has barely been attacked.

We have scientists and technicians ferreting out the secrets of conservation, along with the administrators who must make the decisions and operate the programs.

On the other hand, we have the public which harvests the results.

One of the most serious deterrents to the progress of conservation is that there is too wide a gap between these administrators, scientists, and the public. Until that gap is bridged through common understanding by the public, efforts for extended conservation programs are dragged along by ignorance and lethargy.

Conservation from the state or national viewpoint can be said to be composed of a number of segments. Principally, these are an informed population, effective laws, constructive policies and a practical administration.

Of these points, the main stem is the public that knows exactly what is going on and what is needed. Without this, the hope for laws to build the foundation and create the framework for constructive conservation programs is dimmed.

Along with this, the development of a sound administrative program of progressive objectives is frustrated.

It remains with the conservation writers and press, and educators to combat this lack of knowledge. Their success may well chart the kind of nation we'll have in the future.

In each problem, whether it be a social or economical one, there is a surface that reflects to a natural resource, conservation, or the lack of it. The vitality of a conservation plan depends on the alertness of its advocates to realize these factors.

For example, a valley overwhelmed with flood waters will seek to protect itself with levees and other flood protection works. It will neglect the source of the flood. A town finding itself with a shortage of water may drill another well and overload the water table, forgetting what exhausted the well that is still present.

The fisherman, unsuccessful in a polluted stream, may urge the stocking of hatchery products. He will overlook the problem of stopping the pollution which is so urgent to water conservation and public health.

National legislation has recognized the need for conservation. Of the over 9,800 bills introduced in the first session of the 81st Congress, more than 1,200 touch on some phase of natural resources. The National Association of Conservation Education and Publicity did much to insure this national recognition by its effective support of constructive legislation and its strong efforts against negative legislation.

The President, in his State of the Union message, acknowledged conservation as the third of the ten important goals for the future. A study of the Hoover Commission recommended a Cabinet Department of Natural Resources.

This is a most encouraging awakening to conservation need. But there is still no clear cut policy for the problem. There must be a complete in-



Michael Hudoba

tegration of resource considerations in the national programs affecting resources.

In his history, man has grown by crusades. It has been a vehicle to his routine. He lives because of tomorrow, and the basis of conservation is that there will be a tomorrow. Conservation, in its true philanthropy can mean all things to all peoples.

Each publication in each community can show the relationship of the community with its resources and its stake in conservation.

If the story of conservation can be put across, the restoration of wasted land, reforestation, and a constructive water policy, will postpone the day when demands to exploit secondary areas are made.

The fight for conservation has not been nor will be an easy one.

This article was adapted from an address given by Mr. Hudoba before delegates to the annual meeting of the National Association of Conservation Education and Publicity at Gulfport, Mississippi, last September. Mike Hudoba has been the Washington Editor for "Sports Afield" magazine for the past several years and is recognized as one of the ablest conservation reporters in the nation's capital. The thoughts contained in this article are worthy of the most serious consideration by every sportsman and conservationist in Pennsylvania.



Black Rowdy of the Woods

By Jacob Bates Abbott

CLOWN of the wild or vicious hoodlum, depending whether you sit on the side of the fence with the benign nature lover or with the irate farmer or bee-keeper, the big black bear of our native woods is an animal capable of breaking the neck of a steer or chewing the average human to bits, although his diet is usually beechnuts, acorns and wild berries. Actually black bear's character lies in between the descriptive phrases above. His latent power is there, all right,

but in contact with man, if allowed to do so, he generally fades into the underbrush as secretly as a disappearing ghost. Bears are exciting prey—for the hunter, photographer or field observer; probably the most unpredictable game animal that we have on the continent. One day a mild feeder on herbs and nuts—the next a raging quarter of a ton of destruction. Shy as a cottontail in midday sunlight, a bear will boldly nose around camp refuse at twilight with all the

unconcern of a foraging skunk. Most hunters consider that there's no more danger in hunting black bears than in stalking white-tailed deer, yet the only person ever killed by a wild animal in the State of Michigan was a powerful, experienced, armed woodsman, who lost out in a furious battle with a bear. (Ben East, writing in *Field & Stream*.) In the summer of 1948, the three-year-old daughter of a forest ranger was killed and partially eaten by a black bear in a remote section of the Marquette National Forest in Minnesota. An angry posse later tracked down the bear, shot it, and found the evidence only too unmistakable.

Lest I be thought a sensationalist or alarmist, let me present a few actual scenes from the other side of the picture. The following are quotations from recent *GAME NEWS*' "Notes From The Field," a regular feature, presenting Game Protectors' monthly reports from their various districts throughout Pennsylvania: "A few days ago Mrs. Clifford Benson of Maple Hill, near Wellsboro, went to the mail box, which is some distance from the house and saw twelve bears in the adjoining field. Eight of them were large bears and four were cubs. I asked her if she was afraid of them and she said they were so plentiful and she saw bears so often that they did not scare her anymore."

"Mother bear and three 'pretty little baby bears' were shoed down Juniata St., DuBois recently from a point near the Elmer Hallstrom residence at 12.40 P. M. by William J. Fairman, well-known Luthersburg milkman, who, upon returning from a milk delivery to his truck, stood awe-stricken at the sight of the bear party."

"Residents of Connellsville were amazed on Thursday morning, June 26, 1946, to see a black bear emerging from the alleyway adjoining the Clark Drug Store on North Pittsburgh St. The animal did not seem to be alarmed by the approaching motorists and proceeded north on Pittsburgh St. until it reached Murphy Ave., where it turned west . . ."

In 1905 Pennsylvania became the first state to protect the black bear and classify it as a game animal. The fine bear hunting enjoyed in your Commonwealth is the result of this far-sighted game management

move. In 1924, for instance, more bears were killed (929) during the open season in Pennsylvania than in all the other States combined. In 1945 the kill was 366; in 1947, 569; and in 1949, about 400. In 1905 the open season on bear was for five months (Oct. 1 to March 1); now it is for six days. (In 1949, from Nov. 14 to 19, inclusive.) The largest black bear ever killed in the State weighed 633 pounds, live weight, and 538 pounds hog-dressed. Total length, 9 feet. It was shot on December 4th, 1923, near Milford, Pike County. Between 175 and 190 pounds would be an average weight for adult Pennsylvania black bears, according to Gerstell's table (1948) of recent kills. Bear damage claims paid, with sheep-killing and destruction of beehives the chief sources for the claims, have run as high as \$7,000 annually (1933-34 and 1937-38). In 1947-48 \$2,923.50 was paid. Yes, there are still plenty of b'ars in Penns Woods, probably between 2,000 and 2,500. Of the eastern States, only Maine and North Carolina can boast of more. Of the entire country, the legal kill of black bears in Pennsylvania is ordinarily exceeded only in California, Michigan, Minnesota, Oregon and Washington.

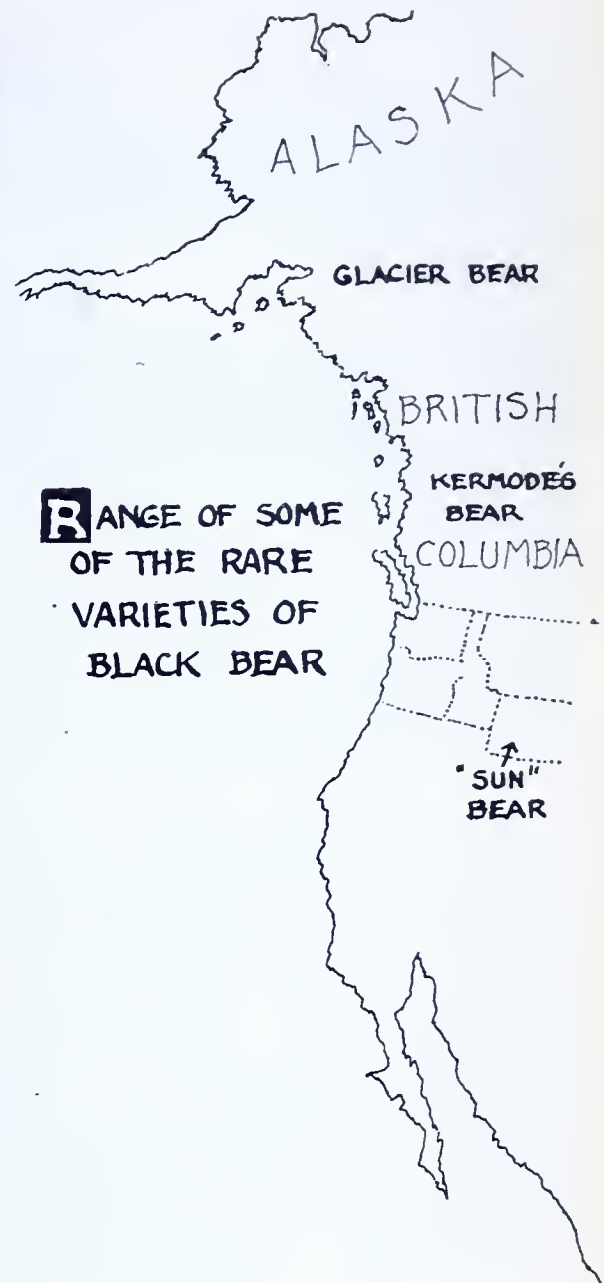
Now, let's cut out killing and figures and inquire a little into the interesting habits of *Ursus Americanus*, or rather, *Euarctos Americanus Americanus*, as I believe the learned ones now label the eastern black bear. *Euar* - - -, what I said before, is one of the Seven Sleepers and customarily holes up in a varying degree of hibernating sleep during the severe winter months, roughly from the end of November until late March. Scarcity of food during these months furnishes the principal urge for this hibernation. It is certainly not to escape from frostbite, for bears are practically immune from cold. They have been found sleeping, in mid-winter, in open hollows, covered only by a few overgreen boughs. Ulmer (*Frontiers*, June 1948) reports that, with dens

available, the bears in the Philadelphia Zoo "frequently lie in the open, oblivious to rain or snow, sleeping as comfortably as a human under blankets."

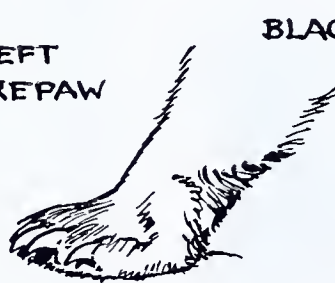
Whether bears do or do not hibernate was spiritedly debated in the newspapers during the winter of 1948, following a Harvard scientist's statement that they do not. His opinion was given further impetus by the stories of bewildered Maine "Wood Dicks," who reported that black bears were roaming through their snow-choked woods when the natural history books said that they should be sleeping. The answer seemed to lie in the degree of insensibility that the bear's hibernation assumed. Blackie does not pass out as completely as hibernating woodchucks and ground squirrels and his body temperature remains high. Many woodsmen have seen black bears ranging the winter forests during a January thaw. Several men, who have been fortunate enough to photograph a female bear and cub during hibernation, have discovered that the mother is by means in a stupor. This was discovered too late by a big mongrel dog which investigated a hibernating mother bear in Clinton County. Leo Luttringer describes this in his "Introduction to the Mammals of Pennsylvania" and, more recently, in his fine article, "Big Bertha," relates the once-in-a-lifetime experience of watching a bear with four cubs who did not believe in sleeping very soundly through winter motherhood.

Cubs are born usually late in January in the hibernating den and are exceptionally small at birth to be the offspring of an animal the size of a bear. They are nearly naked, about the size of a rat and weigh little more than half a pound. The record weight of an adult black bear, as quoted by Seton, is 900 pounds, killed in Arizona in 1921. Well, that one put on about 899½ pounds in his lifetime! Surely not much

(Continued on Page 25)



BLACK BEAR
LEFT FOREPAW



GRIZZLY
LEFT FOREPAW



GRIZZLY

GRIZZLY



DIFFERENCE IN EXTERNAL CHARACTERISTICS BETWEEN BLACK AND GRIZZLY BEARS...

JACOB
BATES
ABBOTT

Fur & Feather Crops From Wetlands

By Phil Barske



THOSE of us who work on various phases of land management are interested basically, in good land management but from there we branch out into specialists—animal, cereal crops, forage crops, etc., and finally, the little appreciated fur and feather crops of the land.

Fur and feather crops depend largely upon the last unit of land classifications according to Soil Conservation Service use capabilities, where, with or without special practices, fish, game or fur-bearers may be produced most feasibly. Almost daily, landowners and organizations controlling units of land are beginning to realize the capabilities of wet areas to produce fish, fur and fowl. For various reasons, many wet land areas on farms are not suitable for cultivation or for agricultural drainage and are worth very little in their present condition. Marsh management provides an opportunity for developing wet lands and very often, after proper development, the returns from muskrats, ducks, frogs, etc., are greater than from any other land use. Quite naturally, the unit that will be favored in production will be the crop that can be controlled and especially in regard to harvest. We know the production and take of fur crops can be regulated by catch regulations but our winged crops offer another problem.

In the past, a great deal has been written about the production possibilities of a wet area and in most of the references fur and fish are basically considered and this is economically sound. Our winged crops present another problem if viewed from the strict production and harvest aspect. On many water areas, a crop of ducks can be produced but the harvest may occur hundreds of miles away from the source of production.

The value of wet lands, and especially those lands that will serve the conservation program best by remaining so is well known but there remains a tremendous potential of undeveloped land—land that is best suited to produce wildlife crop if only a management approach is taken.

History is an excellent medium to point out what has happened and it is supposedly within the realm of the human mind to evaluate past events in the light of future happenings. During the industrial and agricultural development of this country, millions of acres of marshlands, ponds and other water ways have been drained to provide land for human use and misuse.

In the Northeastern States, where the process of land use is beginning to change, much of the land is going back to timber, there are no provisions for restoring former marshes, lakes and ponds once desired and necessary habitat for waterfowl, fur bearers and other forms of wildlife. From colonial days to the height of the industrialization of the northeast, the waterfowl of the region depended upon the numerous mill ponds and water courses for breeding and living habitat, but with the change of decentralized industry, the untold thousands of mill ponds of the region disappeared. The other signs of human progress—pollution, drainage and siltation took care of many more waterfowl habitat units.

We've lost tremendous ground; our wildlife habitat has shrunk. A brief review of the nation's waterfowl population clearly indicates that this crop has shrunk—even if we have the seed, no production will result without fertile growing media and in this instance, water areas that will serve as breeding units for fur-bearers and waterfowl.

When one considers waterfowl in the Northeast, the black duck emerges as the dominant quacker. Kill statistics show the black duck takes the brunt of the hunting season in the Northeast and well over 50% of all waterfowl killed are black ducks.

The black duck is more or less an isolationist when it comes to breeding. Black ducks pair up very early and when ready to set up housekeeping like to go off by themselves. No apartment production for them but a private place out in the brush or even in the woods—but it is mighty important to have a woody-brushy stream or pond close by. For when the nest hatches, there's a bee line for water areas—food and shelter all in one package. When water areas were available, the black duck bred and thrived over the entire Northeast and the possibilities to increase black duck population still exists. The Fish and Wildlife Service is engaged in major restorations on large areas and many states are developing and restoring waterfowl marshes that will serve as feeding, breeding and resting grounds. At the same time, there are thousands of small areas that the Federal and State Services cannot reach that are potential duck producing units. A small water area may produce one brood of ducklings, it may mature only 2 or 3 birds but if we could get thousands of small units producing winged crops, we could, like heaving potatoes in a bag, soon have a sack full.

Muskrats, unlike the ducks, fit into the old category of "a bird in the hand." Produce muskrats on your wet meadow or swamp-land and you have a cash crop. Marshes properly managed should produce an annual harvest of 5 to 15 rats per acre. A four or five acre marsh really begins to pay the taxes! Unlike many wildlife crops, muskrats can be harvested a year or two after the marsh is developed. That is, provided food supplies are adequate. The reason for the quick harvest need is that unless the rats are kept down, they'll eat out their food supply faster than it will grow.

Many of us forget that each rock thrown on the pile makes it bigger; so it is with our muskrats and waterfowl. Restoration of small areas is usually relatively inexpensive and requires little effort but yields a most profitable return. In the entire conservation field, it is often heard said that "it is a grand idea but I can't help out." We as conservationists, sportsmen and landowners can contribute a tremendous amount to the overall program. We consider waterfowl production as a federal function—the administration yes, but not the entire production!

A unit of water area is something that can be planned and developed in a relatively short period and if properly set-up, will be used by muskrat and waterfowl for breeding, feeding or rest-

ing. There is no field in which landowners or sportsmen can contribute more directly to the restoration and perpetuation of our wildlife than by the restoration or development of a small marsh area. We have the land areas, the know-how, but not quite enough interest.

Interest and directed effort can be somewhat like the old grey mare in front of the buggy just about supper time. Many of us have the interest and desire to do conservation work but we just don't have the know-how. Many wildlife projects fail in the very nature of work, for to provide habitat for wildlife we need plants and shrubs and it takes time for any planting to reach a productive stage. Here is where we become impatient and lose confidence in doing improvement work.

On farm wet lands, we can obtain fairly quick results, for as soon as a marsh is constructed or a water body stabilized, plant growth reacts quickly, either introduced or native. Where upland game improvements take years to show results, water habitat improvement shows results in a matter of months.

On many farms there are tracts of wet lands, that, for various reasons, are unproductive for farm crop or annual use. Often, a marsh area can be made to yield a greater cash return than from any other possible use of such land. The economic approach is often a strong one, but to people that love the land, a brood of home grown wild ducklings take the place of a cash return.

How can we plan for a water crop?

Those of us who are fortunate enough to have land adaptable for water cropping want to know the procedures to follow to produce a crop. Like any piece of farm land one must first know what he has to work with, such as existing plants, animals and physical characteristics of the area. A successful water crop (fur and feathers) is just like a successful unit of crop land—a farmer cannot expect to produce a paying crop if he does not know the quality of the land and the crop best suited.

This article is not intended to give the facts on how to create and manage water crops but merely to get the thought and suggestion in black and white. If the interest to create a water area is evident, the Soil Conservation Service or State Game Commission will be pleased to furnish technical assistance in overall plans to create and manage the area.

Take a look at the so-called wasted "wet areas" of your back 40—wouldn't a control structure create a nice shallow pond that will provide class I type habitat for fur and feathers. The importance of wildlife is as far reaching as its evaluation on a purely monetary basis and the biological basis of relationship between soil, vegetation, water and animal life is only now beginning to be understood.

Uncontrolled water is one of our biggest soil conservation problems. The theory of making water "walk" is the goal we seek and small marshes and ponds help in the process. In other words, we become human beavers and make our fast water walk or create a small storage area where otherwise we would have only a wet soil unsuitable for good crop, plant or animal production.

Water storage alone is a good consideration for managing wet lands and the production of wildlife crops can be entirely an above profit project for the impounded water can serve such useful purposes as providing water for home use, maintaining ground water level, as well as improving the looks of the land.

Give some consideration to that wet land before you condemn it as an almost worthless or at best a short time pasture. Soil Conservation Service or your State Game Technicians, armed with a level and power equipment, have the magic wand that can entice a pair of mallards or blacks to scale in at evening or lure a pair of "rats" that will provide your source of extra dollars for hides rendered.



When water areas were available, the black duck bred and thrived over the entire Northeast.



Produce muskrats on your wet meadow or swampland and you have a cash crop.



Hal Harrison Photo
We can become human beavers and make good water storage areas out of former wasted soil.

Multiflora Rose - the living farm fence



What is multiflora rose?

Multiflora rose is a dense, thorny shrub that grows to about eight feet in height and width. Brought to this country many years ago as understock for cultured roses, it has recently been found to have a great value to the farm. Early experiments showed that, on fertile soils, multiflora rose would produce a lowcost, effective living fence without the drawbacks of the traditional Osage orange hedge. The trouble was it did not grow well on soils of lower fertility.

That difficulty has now been overcome. Missouri game technicians, interested in multiflora rose for wildlife cover, developed simple ways to insure good growth on all but the very poorest soils. As a result, most farmers can "plant a fence" that will be stockproof in from three to five years. Its value to wildlife has also met expectations, and multiflora rose has quickly become popular with Missouri farmers.

What are its advantages?

Let's look at some of these new fences and see why they are so popular. *Ease of building* might come first: plowing and fertilizing and setting plants is usually easier than digging post-holes and handling wire. *Long life* is another selling point: the oldest multiflora rose planting of which we know is 25 years old, and it is still in excellent condition.

Flexibility rates high, too: a living fence can be run in curves, at sharp angles, or even in circles without any need for dead-men, guy-wires, or brace-posts. That's handy for fencing ponds, gully-heads, or contour lines. *Ease of upkeep* appeals to busy farmers: after two years of cultivating or mulching to keep weeds down, the fence takes care of itself. If a fence-line has to be changed, multiflora rose is not hard to pull out. The *holding quality* is satisfactory for all livestock from cattle or horses to small pigs: the thorns repel livestock without causing cuts.

Multiflora rose does not spread from the roots: the roots grow mainly downward, in a space about two feet wide beneath the plants. They do not sap fertility from nearby ground. Spreading by seed-eating birds is not a serious problem; the few plants that may come up out of place are easily taken care of in normal farming.

What about wildlife values?

The dense, thorny branches make fine protective cover for quail, rabbits, songbirds and wildlife of similar habits. The plants grow to make a sheltered tunnel between the stems and the out-curving branches, that makes a good, safe travel-lane. Songbirds of many kinds nest securely in the branches. The red berries or "hips" are eaten by birds in winter.

Where can I get multiflora?

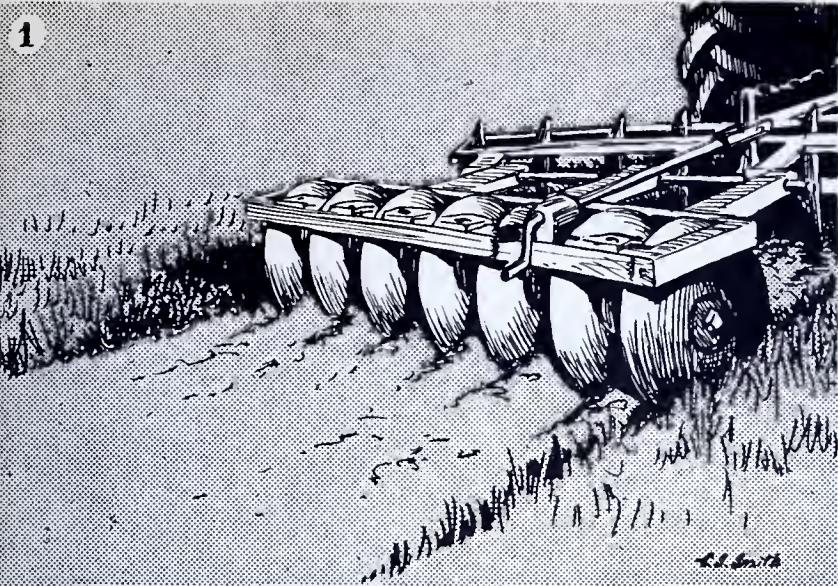
The Pennsylvania Game Commission can not provide multiflora seedlings due to lack of nursery facilities. The Pennsylvania Department of Forests and Waters, however, may be able to provide limited numbers of seedlings to interested farmers at a cost of \$6 per thousand plus shipping charges. Multiflora rose can also be purchased from a number of commercial nurseries and it suggested you contact the nearest nurseryman for additional information. Some of the nurseries known to handle multiflora planting stock are: C. L. Vanderbrook & Son, Manchester, Conn.; Farm Landscape Co., Box 230, Urbana, Ill.; Forrest Kelling Nursery, Elsbury, Mo.; C. R. Burr, Manchester, Conn.; Brownell Roses, Little Compton, R. I.; Arthur Dummett, 63 Anderson Rd., Bernardsville, N. J.; Star Roses, West Grove, Pa.; Fairview Evergreen Nurseries, Fairview, Pa.; Musser Forests, Inc., Indiana, Pa.; Springhill Nurseries, Tipp City, Ohio; Brookville Nurseries, Glen Head, N. Y.; Boulevard Nurseries, Newport, R. I.; Brown Bros. Co., Brighton Sta., Rochester 10, N. Y.

How many plants are needed?

It takes from 100 to 200 plants to set 100 feet of fence, depending on whether they are set at 1-foot intervals to hold large livestock, or at 6-inch intervals to hold everything, down to a small pig. When the number of plants is figured, *10 percent extra should be added* to provide spare plants (temporarily heeled in) for the prompt replacement of any plant that may die.

For all its good qualities, multiflora rose is not a "miracle plant." It doesn't grow well in deep shade, or in very wet soil. Sandy soil, too, requires special attention in fertilizing and mulching, if multiflora rose is to do well. It must be in all cases planted and cared for according to directions, until it is firmly established. When that is done, it produces a long-lived, efficient fence.





1. Disk an 8-foot strip; add manure, and 320 pounds of 4-12-4 fertilizer per $\frac{1}{4}$ mile; plow with back-furrow in center; re-disk or drag.



2. Plow a furrow down center of the strip. Open one plant bundle at a time; keep roots immersed in a bucket of thin mud. Set plants against vertical berm of furrow; pack a handful of dirt against the roots.

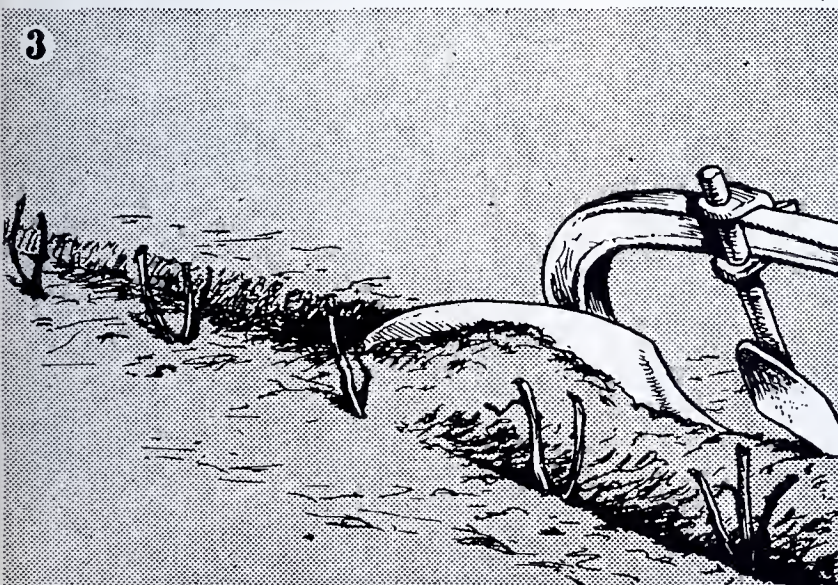
HOW TO PLANT AND CARE FOR MULTIFLORA ROSE

Multiflora rose cannot be expected to make a good fence if the plants are just stuck in the ground and forgotten. The steps in the planting and care, given below, must be followed to insure success. These steps are: (1) Prepare the planting bed the fall before the plants are to be set; (2) in planting, keep the roots moist, set plants so dirt will come just above the root collar, and pack dirt firmly around the roots; (3) cut plants back to about 2 or 3 inches above ground level; (4) keep weeds down by cultivating or mulching for the first two years; (5) replace all weak or dead plants promptly; (6) protect plants from grazing for the first two years.

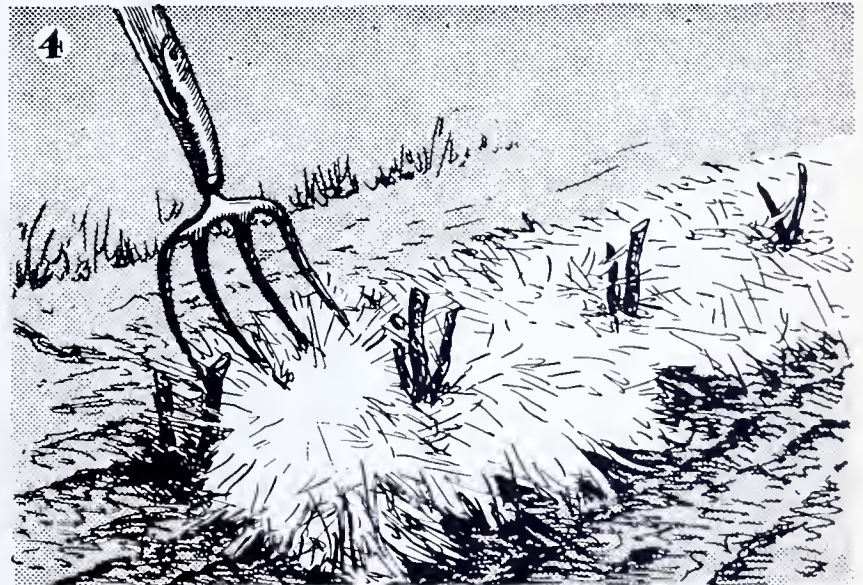
Remember to figure actual needs and then order about 10 percent extra plants for replacements. This is very important, because it is very seldom in setting out plants of any kind that 100 percent survival results. In a living fence, a dead or spindly plant means a gap. It is easy to prevent gaps in a multiflora rose fence just by setting another plant in any weak place that develops. The trick is to make those replacements as soon as possible in order that the new plants get off to a fairly even start with the rest. That is the reason for having a reserve supply of plants on hand.

The extra plants can be kept in good condition by heeling them in near the fence where they will be handy. This is a simple process: dig a trench, long enough to hold the plants when they are spread out in a single layer two or three inches apart, and deep enough to cover them just above the root-collar. Be sure the dirt is moist and packed firmly around the roots, and tamped down around the stems. The plants should be shaded and kept moist. Weak or dead plants in the fence line will usually show up within 30 days, and transplants should be made from the heeling-in bed as needed.

Reprinted from "Missouri Conservationist," Vol. XI, No. 7, July, 1949.



3. Cover the plants by reverse furrowing, packing the dirt by foot or with the tractor-wheel. Prune plants to within 3 inches from ground level.



4. For two years: cultivate well to keep weeds down, mulch each fall to prevent frost-heaving, and protect plants from grazing.

Pennsylvania Strip-Coal Mining by R. J. Laing



ALTHOUGH Pennsylvania ranks first in strip coal production, it was a late-comer into the field. A small area was mined during World War I, but the industry did not reach its stride until the advent of World War II. To date approximately 250 million tons have been mined by the Open Pit method in Pennsylvania, which, at the rate of 5,000 tons to an acre, disturbed 50,000 acres of land. Although this seems like a large area, when viewed in relation to the total acreage of land in the state it is infinitesimal. Pennsylvania has 28 million, plus, acres of land. We can, therefore, conclude that only .0017+ % of the land in Pennsylvania has been affected by open pit mining, which is less than 1/5 or 1% of the total area.

We have no accurate means of predicting the amount of coal remaining which can be recovered by the open pit method. If we base our judgment on present trends, however, I think we can fairly predict that the cream of the crop has been mined and that when all the coal is mined that can be economically recovered by the open pit method, it will amount to considerable less than ¼ of 1% of the total area of the state.

The coal in Pennsylvania is mined on what is known as the contour plan. It is often referred to as deep plowing. The operator follows the out-crop around the hillside so to speak, and removes up to a maximum of 100 feet of cover. The amount of cover removed, of course, depends upon the thickness of the coal vein, the quality of the coal and the character of the overburden. 100 feet of overburden is the exception rather than the rule. An average of 45 feet of cover, we believe, would be quite accurate.

Unlike the Mid-West States where open pit mining has been conducted for quite some years and the coal lies in constant beds on level terrain, Pennsylvania coal beds that are suitable to open pit mining are quite spotty and lack uniformity. For that and other reasons, it is impossible to use the large equipment that is employed in areas where the beds are constant.

At the present time in Pennsylvania, the annual production is running at the rate of 16 million tons per year, compared with 34 million tons in 1948.

Since the beginning of open pit mining in Pennsylvania, various agencies, groups and individuals have expressed considerable

alarm over the seemingly disregard for our number-one natural resource—land. Some of these alarmists have approached the problem with practical procedure. Others, of course, have become quite hysterical and have looked at the problem with a spirit of idealism. 85% of the land disturbed by the open pit method in the Bituminous fields of Pennsylvania, were classified, prior to the open pit operation, as sub-marginal and waste lands. The areas had no present utility and could, in a great many instances, be purchased for as little as \$5.00 an acre. The dilemma facing the land and coal owner was—"Shall I continue to pay taxes on this non-revenue producing land or shall I sell the coal and get financial return?" In most cases, the owner selected the latter course. With the money derived from the income of the coal, the land owner was able, quite frequently, to pay up his back taxes, pay off mortgages and make repairs to remaining land and buildings.

At that time little or no thought was given to the utility of the land for the future. As the industry increased in activity, those practical individuals who were honestly concerned with the utility of our land, gave

serious thought to finding ways and means of putting these disturbed areas into production. They had no background of experience. They were harassed from a great many directions by the public in general, who had been inadvertently indoctrinated by a pessimistic attitude on the part of the less practical. There were a few isolated instances in the state, where areas disturbed during World War I had been planted in trees and produced excellent results. They also discovered in their search, areas that were completely covered by voluntary growth of many species of plant life. With these isolated instances, individuals and public agencies slowly began to formulate a systematic approach to the problem.

Excursions were made to Mid-Western states where open pit mining has been conducted for quite some years and where there has been a planting program in effect for quite sometime. Agronomists and other land experts of the United States Soil Conservation Department, The Pennsylvania State College and the Department of Forests and Waters of the state, became vitally interested in the problem and began experiments to discover the best way to treat the disturbed areas. Although there were certain rugged individualists who objected to the intrusion on property rights, the majority of the substantial coal producers in the state welcomed these experiments, the results of which were eventually passed on to the land owner. Some of the larger coal producers employed professional foresters to look after their individual operations. Those in charge of research and experiments ran into many difficulties. The lack of consistency in the terrain of the Pennsylvania coal fields prevented any specific conclusions. Even in contiguous areas there was a lack of consistency in the character of the overburden. The great majority of the disturbed areas, after the mining process, were discovered to be acid in character. In areas where rooster coal, bone and unmarketable coal were mixed with the overburden, the degree of acidity was too high to support any known type of vegetation. It was discovered, however, that the majority of the areas disturbed would support some type of vegetation. The areas in which acidity was concentrated would, over a period of years, through leaching, also become usable. As a result of initial experiments and study, there was a general belief that "each area is an individual and must be treated as such." In other words, no definite formula could be ascribed to the entire area disturbed.

Along with the study of the soil characteristics, considerable attention was also given to methods of treating the physical surface after the mining process. An economic problem was involved. The question arose in a good many minds as to whether these disturbed areas should be returned, at tremendous cost, to their original contour with utter disregard to utility, or should the areas be treated in their present condition. Here, again, difficulty was encountered. Where utility or land use was the uppermost problem in the minds of those interested in reclamation, no definite recommendation could be applied. Just as in the matter of the character of the overburden, no general treatment could be recommended. Here, again, each area was an individual and should be treated according to utility

and best land use. Where complete return to the original contour would serve best land use purposes, this type of treatment was recommended. In other cases, rounding off the peaks was used and in other instances it was discovered the land could be most productive in its present state of disturbance.

We estimate, in Pennsylvania, that approximately 20,000 acres of disturbed areas have been given utility. The majority of these lands have been planted with trees. Conifers, because of the high acidity of the soils have been used to a greater extent than any other species. In 1948, 2½ million trees were planted on disturbed areas. Some of the lands have been planted in grasses, grains and forage. A small amount of acreage has been planted with various types of shrubs. Where the planting has been done according to plan, with the advice and guidance of professional agronomists and foresters, the survival has been very good. Promiscuous planting, on the other hand, without proper forethought, planning and careful selection, results in poor survival.

There is, however, no excuse for failure in the planting of disturbed areas. The Department of Forests and Waters in the State of Pennsylvania has trained expert personnel, who are on call at any time for advice and direction. This Department, with the limited facilities and personnel, has been most cooperative. Although hampered by lack of stock during the war years, the nursery program is well underway and it is estimated that in the year 1950, 7½ million trees and shrubs will be planted under the supervision of the Department of Forests and Waters on areas disturbed by open pit mining in the bituminous coal fields of Pennsylvania. The Department of Forestry of The Pennsylvania State College has conducted numerous experiments on these dis-

turbed lands. This agency also has cooperated diligently with the operators and have been quite generous in the dissemination of knowledge gained from studies and experiments.

Although no specific studies have been made concerning the nutriment content of fruit and vegetable produced on disturbed areas, general observation is that these eatables contain a pleasant flavor not found in those produced on other lands. Studies are being conducted in this field to determine the cause of this. Perhaps there is something turned up in the soil that will be a boon to producers of fruit and vegetables.

The problem of treating areas disturbed by open pit mining in Pennsylvania has served another purpose. It has called attention of land conservationists to other types of industry that disregard land use. The most flagrant abuser of the land in general is the farmer. Thousands and thousands of acres go out of production each year because of mis-management and lack of faith in recommendations of such agencies as the soil conservation personnel. Each year, thousands of good farms are washed down the streams of our Commonwealth and many good farms are ruined because of erosion. The areas disturbed by the open pit industry are picayune compared to this land waste. This type of mis-management has real cause for alarm. When we witness these mal-practices and read "Our Plundered Planet" and "Road to Survival," we exist in a natural state of alarm. Land is our number one resource and the quicker this present generation comes to the realization that these lands are in a sense a heritage, and it is our obligation to pass them on to posterity in just as good or better productivity than we found them, the better it will be for all concerned.



In Pennsylvania 20,000 acres of disturbed areas from strip-coal mining have been replanted with trees.



Proving that deer hunting in Pennsylvania can get almost too good, these members of the Buttonwood Camp in Sinnamahoning, Cameron County, bagged their camp limit of 6 deer before noon on the opening day of the 1949 deer season. Standing, left to right, Bruce Fanus, Ralph Waltz, Marlyn Stum, Milton Fanus, Sr., John Long, Milton Fanus, Jr. Front row, left to right, Lester Stum, Billy Stum, Joseph Kiren, Gruver Fanus, Archie Fanus, William Stum.

Our Progress

LAST October you were informed of our programs, progress and plans. Since that time we have been pushing forward to obtain the earliest possible results. Today, we are glad to report entirely satisfactory progress and during this year, considerably more than last, we should feel and see the effects of the many new things being done for the benefit of our wildlife, the farmers, landowners, and the sportsmen.

Putting the Sportsmen's Dollar to Work

Under our present policy we are doing all within our power to put the sportsman's dollar to work for the benefit of those mentioned—just as promptly after it is received as is possible—consistent with its wise use and lasting effects. We believe the money the sportsmen contributes should be used promptly so that they can expect constant progress and receive early dividends. That, in our judgment, will meet with your endorsement.

A Successful Game Season

Since we met here last October, we have had one of the most successful hunting seasons on record for many years. Game Kill Reports prove a reasonably satisfactory game population, widely distributed, and we enjoyed practically ideal weather. We would be very fortunate if we could always have comparably satisfactory seasons in the future, but our efforts will be expended toward improvement and we have reason to view the future with considerable optimism.

Appreciating What We Have

If you want to appreciate more fully what is ours, we suggest that you talk to those who hunt in other States, or those who come to Pennsylvania for their sports afield. In that way you'll learn that our wildlife crop grows pretty green within the borders of the Keystone State, and the less fortunate look upon us with both envy and admiration. All this is accomplished under trying and almost unsurmountable handicaps; in fact, it is growing more difficult each year because of the march of progress and civilization which in effect puts a squeeze play on our wildlife.

Conservation Interest Increases

No single thing is more responsible for these fine results than the widespread effect of our conservation education appeal which has been and is taking root in the hearts and minds of our sportsmen and in the youth of our State. They are realizing more and more each day that results come only through hard work, the expenditure of money and constant cooperation. If you want to appreciate the progress in the development of sportsmanship, compare your membership, the interest and the efforts with those of 15, 20 or 25 years ago. You'll find that people are seriously and sincerely interested and working to brighten the future. But a warning should be sounded before it is too late.

Safeguarding Your Interests

By Tom Frye

*An Address to the Pennsylvania Federation of Sportsmen's Clubs
February 18, 1950*

The Thoughtless Few

With all the understanding and fine sportsmanship we have and that which is being developed, yet there is among us a very small minority that is eating like a cancer at the vital part of our American heritage of hunting and the effect is the rapid restriction of acreage upon which you are permitted to seek game. Unless we can find ways and means of forcing those few to respect the rights of the farmers and landowners it may well come that even fine sportsmen will be denied the privilege in the future. Don't ever overlook the fact that the farmers and landowners are your hosts and be sure that every person who goes afield treats them accordingly. It's one of the most serious problems confronting us, and your local organizations can be of greatest help in bringing it under satisfactory control. Right now it is a raging fire all over Pennsylvania—like the result of the careless and indifferent use of matches by only a few.

The Deer Problem

In spite of this tremendous kill in a State that had practically no deer long after the turn of the century, we are besieged from many sections with demands to reduce the herd drastically to alleviate damage to gardens, crops, forests and automobiles. The Commission is faced with one of the most serious problems ever confronting it when it meets in July and decides the season and legal kill of the whitetailed deer. No one is as much interested in doing the right things as those eight Commissioners, upon whose shoulders rests the burden of solving a difficult problem. It would be well for the sportsmen to look squarely at all phases of the problem and imagine himself in the place of the farmer, landowner or motorist who pays dearly through damage resulting from an unbalanced and over-populated herd. It is a big and important problem that requires the best and most serious thinking if the interests of all are to be served. **ONLY THE FUTURE WILL REVEAL THE RESULTS.**

Commission—Federation Wildlife Exhibits

To those of you who were not fortunate enough to see the jointly-sponsored wildlife exhibit at the Pennsylvania Farm Show in January and which will be repeated at Philadelphia next month with some improvements, you are reminded that you missed one of the finest, most interesting and educational exhibits that has ever been presented to the public.

(Continued on Page 32)



Over 800,000 visitors to the 1950 Farm Show in Harrisburg saw this education display of hawks and owls.

PLANT

WATER CRESS

FOR WILDLIFE

By Ted Carlson

District Game Protector

THE planting of water cress in the ice cold spring runs that abound in the western plateau area of Elk County has met with considerable success during the past six or seven years. Today literally hundreds of these springs runs have been planted and are busy growing a food crop that appeals to and nourishes wild birds and wild animals, especially the deer, beaver, muskrats, wild ducks and wild turkey. The plant is very hardy and continues to thrive all winter long, and is not affected adversely by cold weather, deep snows or frosts.

The U. S. Department of Agriculture Bulletin No. 205, "Eleven Important Wild Duck Foods" by W. L. McAtee, Assistant Biologist, lists the water cress as being a very valuable plant for wild ducks, and where firmly established grows so fast that ducks cannot eat it out.

What It Is

Water Cress (*Sisymbrium nasturtium-aquaticum*) either floats in the water, rooted only at the lower end; or creeps along on mud in shallow water, throwing out roots at every joint. It is a smooth fleshy plant with divided leaves and small white flowers. The leaves consist of 3 to 9 symmetrically arranged oval or rounded segments, of which the apical of each leaf is the largest. The pods vary from one-half to one and one-fourth inches in length, are slightly curved and contain numerous small seeds. There is a constant succession of flowers and pods throughout the growing season. The plant sometimes is strongly tinged with olive-brown, suggesting one of its common names, brown-cress. Other names are well-cress or grass, water-kers, kars, karse, crashes, and brook-lime.

When To Plant

Although water cress can be planted by seed the transplanting method is by far the best. We are fortunate in this area near Wilcox, Elk County, where there are a number of large springs that abound with this cress, from which yearly we obtain permission to take some twelve to fourteen bushels of these plants and transplant them to woodland areas. March and April are the ideal planting months; later than this the plant grows so tall that it is quite awkward to handle.

How To Plant

Plant and roots are easily lifted out of their beds and placed in a container (a galvanized bushel measure is ideal). Considerable water is contained in the matted root



Game Protector Ted Carlson examines some water cress in a spring fed feeder stream along Mill Creek in Elk County. Carlson planted this cress several years ago and it has now spread until it fills much of the stream.

Hal Harrison Photo

system; this should be drained off to lighten the load. Layer upon layer may be placed in the container as the plant is quite hardy and tenacious of life. Knee length rubber gums or hip boots should be worn, as this type planting is a wet job and the waters are quite cold. For best results the cress should be re-planted as soon as possible, and in any event within a five-hour period.

In re-planting, the cress should be put in cold spring runs, as it will not grow in the larger streams or creeks. It is evident the even temperatures of the spring runs, summer and winter, are an important factor in its growth. These spring runs should be investigated beforehand, as they are usually of two types; those with mud or silt bottoms and those containing pure gravel. The mud or silt bottom is easy to plant. Take a small handful of cress and shove the roots down deeply into the mud, directly in the spring run channel. During high water the channel is sometimes hard to find which necessitates care; otherwise the cress will not thrive unless the roots are entirely under water.

Gravel bottom offer more trouble, as it is difficult to get the roots to stick in. Flat stones can be laid on the roots to hold them; or the spring run may be slowed down by throwing logs, limbs of trees, etc., across the flow to retard same. In carrying the cress from car base to spring runs a chip basket can be used very nicely. This basket has an added feature of letting the water drain from the roots.

Where To Plant

The entire length of the spring run should be planted with the heaviest plantings in the headwaters. Once established, the cress is continually breaking off and floating downstream to replant itself. Where you have a heavy concentration of deer brushy dead limbs and dead trees should be thrown over the cress to ward off and discourage the deer until the cress is established.

An added 5 or 10 lbs. of commercial fertilizer to each spring run is a boon to the water cress and helps it grow. The fertilizer is thrown directly on or around the plants in the water. Depth of water is of little importance as the cress will grow in spring runs up to a foot and half in depth.

In planting by the seed method, the seeds are mixed in with a ball of mud or silt. This ball of mud is placed in the spring run in a sheltered spot. The seeds can be pushed down into the mud in shallow water. (Seeds may be obtained from most vegetable seed houses). The best method is, however, by transplanting. Once established a good spring run can be used as a base of operations.

It is a distinct pleasure to travel through the forest during the heart of winter and come upon one of these spring runs literally choked with the beautiful green leaves of the water cress and to realize that here we've put these spring runs to work, furnishing a splendid nourishing food for all wildlife during the most trying period of their lives—winter.

AN INTRODUCTION TO STOCKMAKING

By E. Stanley Smith

Part IV. Shaping the Stock

It is a well-known fact among gun stockers that many little-innocent-appearing jobs turn out to be tough as squirrel hide, while the most formidable-looking tasks are often comparatively simple. Stock shaping is an excellent example of the latter. At first glance that huge hunk of walnut to which you've attached your pet barrel and action looks more like a bull fiddle than a gun-stock, and you probably feel that nothing short of a miracle can convert it into a reasonable facsimile of a stock. You'll find, however, that when it comes to unadulterated cussedness the shaping operation can't hold a candle to inletting, and with a little care you can form a nice-looking stock the first try.

Let's take the shotgun first. Make a tracing of the outline of the finished stock on the side of your blank, using the cardboard pattern you made previously. To get the drop right on the button you will have to determine the line of sights either by laying a straightedge along the rib and projecting out over the stock, or by stretching a string from the front bead to a strip tacked to the butt of the stock. Then measure the drop from there.

Now saw off the butt to the exact length and pitch, using a fast, circular saw, if you have one, or a fine-toothed mitre saw. True up this cut with a sharp block plane and fit the plate by spotting with Prussian blue

and scraping off the high spots. Now, if you ain't agin cheatin' a little, you can simplify this fitting by relieving the wood with a gouge or chisel so that it contacts the butt plate only around the edges and screw holes (fig. 4). With the plate flawlessly bedded drill the proper screw holes, coat the butt plate and butt with spar varnish and fasten them together with the two wood screws.

Saw out a notch at the end of the pistol grip and attach the grip cap as you did the butt plate.

Now remove all the metal parts from the stock and saw off the surplus wood outside the outline, cutting as close to the line as possible without wandering over into the "good" wood. If you have a band saw for this operation you're lucky—it will save you a heap of work. Without one you'll have to attack the stock with an assortment of cross-cut, rip and compass saws. When this job is finished turn your attention to the sides of the stock. These must be shaped as the edges were, but as the slice to be removed is usually pretty thin and the saw difficult to guide this will prove to be a "thin ice" job. If the grain is straight and the amount of wood to be removed not excessive a draw knife will probably be more practical than a saw, and in curly grain a coarse rasp will work fine.

Completion of this operation will leave the stock with a four-cornered cross-section. Now it will be necessary to cut off these corners, making the cross-section eight cornered. What we're doing is applying the trick used by old-timers to form dowels, ramrods, etc., by continuing to knock off the corners until the work assumes a round shape. Of course, the depth and angle of these cuts on a gun stock must vary considerably according to the desired radius of each part. Before working on the corners take a sharp chisel and shave down the top and bottom of the stock around the frame so that the wood is perfectly flush with the metal parts. Be careful here, not to let the chisel scratch the bluing, unless the frame is to be re-blued after the stock is finished, in which case you can throw caution to the winds and file, sand and polish the wood and metal together for a high class finish. Chisel away the wood around the lock plates also. Notice how the oval grip blends into the square part of the stock surrounding the frame. When cutting off the corners of the grip don't forget to leave this square part untouched.

Bevel the corners along the comb, cutting deeper as the nose of the comb is reached, then do the same to the underside of the stock between the buttplate and pistol grip.

Always keep these cuts perfectly straight wherever the stock outline so indicates. The top line from butt plate to the nose of the comb, and the bottom line from the butt plate to the grip cap are two places where this is most imperative.

The best tool for this work depends upon the grain of the wood. In straight-grained wood it's hard to beat a good, heavy draw knife, but in curly wood the rasp is the answer, although I've seen some skilled wood workers do wonders with a razor-sharp drawknife in curly wood by holding the blade in a diagonal position instead of at right angles to the direction of the stroke.

By this time the stock should bear some resemblance to the finished product. The

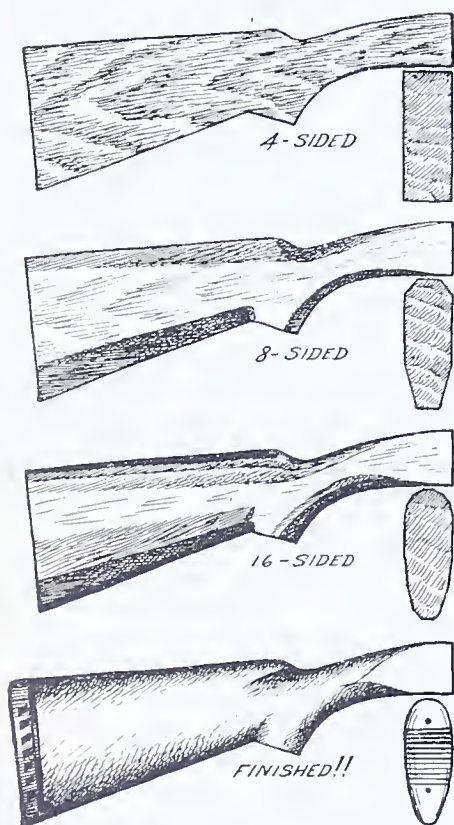


fig. 1

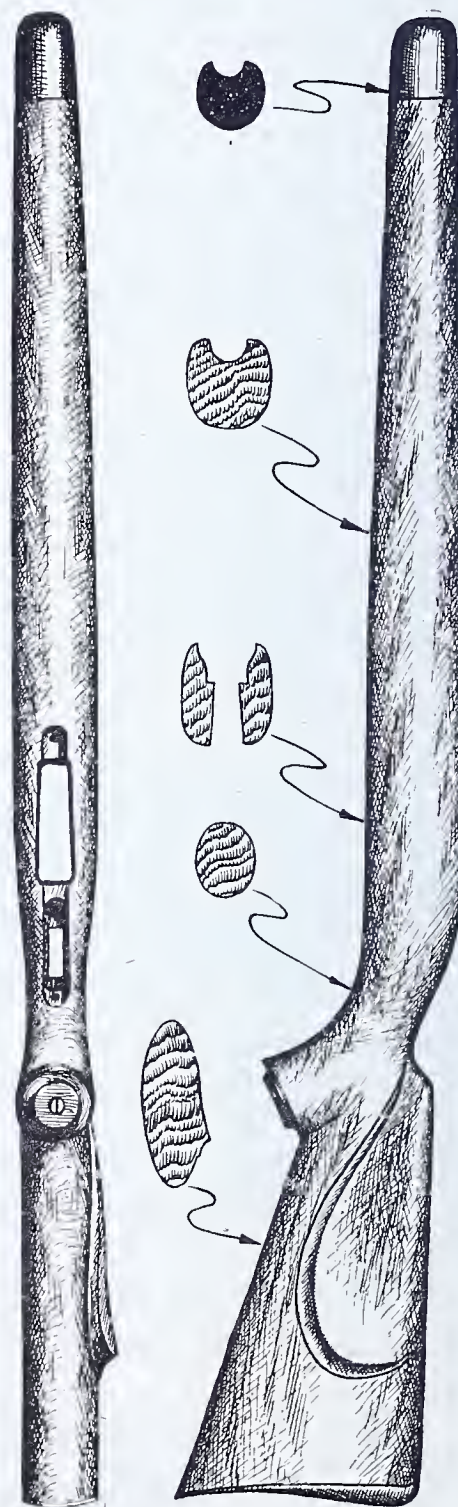
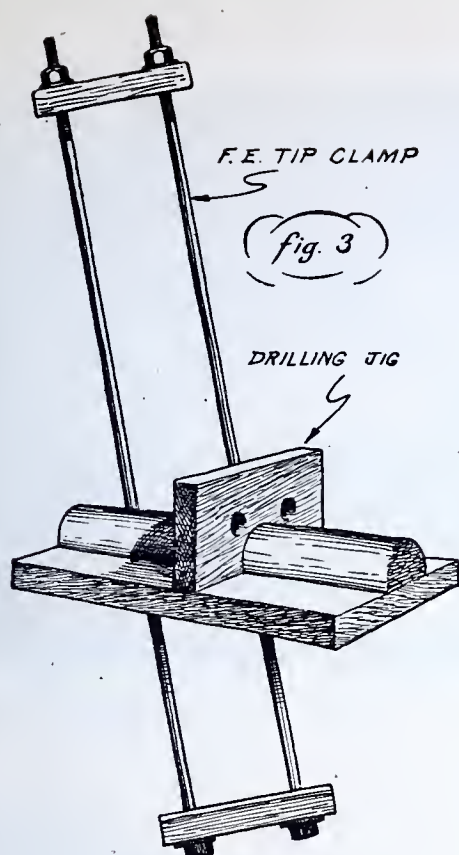


fig. 2



When filing and sanding the stock you'd better remove all the metal parts to avoid marring them, but be sure not to round off the sharp edges of the inletting. Merely touching them with sandpaper will ruin the appearance of the work on which you lavished so much time.

Double-gun fore-ends are shaped in the same manner as the stocks. The extra length of wood on the end was to serve as a "handhold" for the vise, and should not be amputated until the fore-end is finished but for the sanding. Then clamp the piece in the vise, padding the jaws with heavy cardboard or leather and filling the barrel grooves with half-round pieces of soft wood, and saw off this end. File it to shape, then sand as you did the stock.

Round slide action fore-ends can be made on a lathe. Turn a slightly tapered wooden mandrel several inches longer than the fore-end to fit the magazine hole. Drive it into place, taking care not to split the fore-end, and place the whole works between the centers of the lathe. Remember, in inletting such a fore-end to be *turned* to shape, the barrel channel had best be omitted until after the outside is turned, as this channel would probably splinter badly under the turning tools. If the outside is worked down by hand it makes no difference when you form the barrel groove.

Bolt action stocks are naturally the most complicated of the lot to shape. The first job is to carve out the bolt handle groove, allowing plenty of clearance for any dirt that might lodge therein and prevent the closing of the action.

Make a complete tracing of the stock and fore-end outline as you did with the shotgun stock. Saw around this outline, then saw or rasp the sides to shape. Bevel the corners as before. Don't make your stock too narrow at the receiver—this not only cheapens the appearance of the rifle but also sacrifices a great deal of strength. Keep the fore-end full, too, for nothing contributes more to steady holding than a fore-end that really fills your mitt.

If you want a cheekpiece on your rifle, outline it on the wood before you rip off the sides of the stock. Saw a kerf across the side at the front and back of the proposed cheek-piece and rip the sides up to those kerfs. Rough out the remainder of the outline as you shape up the stock, finally working out the radius or other design of the edge as you finish-file the stock. Leave the side of the cheek-piece 'til last and shape it to fit your face perfectly and bring your eye into alignment with the sights. Flaring the rear portion of the cheek-piece outward will eliminate much of the recoil customarily absorbed by your cheek-bone.

After most of the wood is roughed away at the butt you can fit the crowned steel butt plate. First roughly shape up the butt to fit the concavity of the plate. Then measure carefully and cut out the recess for the lip. There's no good shortcut to success here—only plenty of Prussian blue and lots of whittling will make the plate fit as it should. Be sure to bed it neatly around the edges and around the screw holes. Seal the end grain with spar varnish and screw the plate in place.

Somewhere in the past gun nuts became obsessed with the notion that a bolt action rifle wasn't worth a hoot if it wasn't fitted

with a horn tip. Such an ornament does look nice when new, but has a tendency to shrink away from the wood—which doesn't help its appearance at all. However, if you still consider a fore-end tip essential, here's the way it's done. Smooth off and square up one end of the horn block. Flatten the top and cut a barrel channel in it with a graver or a rasp. Make this channel a trifle deeper than the one in the stock so that it won't bear against the barrel and be jarred loose by the vibrations. Now make a jig like the one shown in fig. 3 to locate the dowel holes. Clamp the fore-end in one end of the jig and bore the holes as straight as possible. Remove the jig, clamp the horn block on its *other* end, and drill the holes in the horn to the correct depth. Now slip these two pieces together with snug fitting dowels to guide them. Pare away the wood until it fits the horn to perfection, then replace the dowels with a pair of hardwood ones that really fit tightly. Coat the dowels and the face of the horn and wood with good hide glue and drive the tip into place. Clamp the two parts together with an apparatus similar to the one in fig. 3, one bar of which fits the magazine mortice, and don't touch them for several days. Then drill several small holes from the barrel channel down through the dowels and into them drive tight fitting, glue-coated, wooden pegs. When all the glue is absolutely hard, rough out the tip with a rasp, file it to shape and sand it to a perfect finish.

Now you can go back to the task of beveling the corners of the stock, which, of course, is continued until a rounded form is achieved.

If a recoil pad is desired, it should be installed before the final filing takes place. Attach it as you would an ordinary hard rubber butt plate, then using a power driven grinding wheel or a sanding disc buff the pad down to the desired size and shape. Don't make the dumbhead mistake of buffing this part at some silly angle—make the pad an exactly parallel continuation of the stock.

Swivel bases are inletted before the final filing. Drill the screw holes first, then attach the base to the stock and scribe a line around it. Remove the base and with a bit a trifle smaller than its width bore two shallow holes to receive the rounded ends. Cut out the remaining wood, then seat the base carefully, using the usual Prussian blue to get a snug fit.

Barrel bands are installed at this time. Be sure the barrel is firmly supported by the fore-end wood at the point where the band is located.

Figure 2 shows a nicely proportioned bolt action rifle stock displaying not only the side and bottom views but also the cross-sections at various points. Study these before you begin hacking out your stock—you'll probably pick up a few pointers that will help you to give that hunk of walnut a pleasing and practical shape. And for Pete's sake, for the present at least, forget all about originality of design. That's all right after you've made a few stocks and know what it's all about, but for the first attempt stick to the good-looking, tried-and-true designs that carry the stamp of approval of our gun experts. I've seen stocks that resembled anything from canoe paddles to ocarinas, but without exception, the most pleasing ones were those that looked like gun stocks.

next step consists of heightening the resemblance by removing the corners as before, producing a sixteen-cornered stock, then repeat to form a thirty-two cornered cross-section. At this stage of the game you will likely find a spoke-shave or a rasp more suitable. Round off all the corners and shave off all the high spots, shaping the stock as neatly as possible and blending all lines together smoothly. There are a few pitfalls the amateur stockmaker must avoid. One place where the beginner usually proves himself a stinker instead of a stocker is at the junction of the rear of the pistol grip and the underside of the stock. Carry the lines of the underside of the stock right up to the rear of the pistol grip in a perfectly straight manner—don't curve the bottom of the stock inward at the grip.

Go over the entire stock with a cabinet file, eliminating all marks left by the rasp. For the neatest possible appearance file the wood and hard rubber of the butt plate and grip cap together so they will be absolutely flush. If you want the sides of the comb undercut at the nose you'll have to go to work on them with a gouge or a half-round file.

Now, with a rather fine file smooth up the entire piece, then go over it with medium sandpaper, removing all file marks. Using successively finer paper sand the stock until the surface is as smooth as glass and free of all scratches and tool marks.

Some of the fibers of the wood that have been cut off obliquely are bound to curl away from the wood the first time the stock gets damp, therefore they must be removed. To do this first wipe the stock with a wet rag, then dry it as quickly as possible by passing it through the flame of a stove or torch. This will raise the grain. Cut off these "whiskers" with fine steel wool until the stock is as smooth as before, then repeat the process as often as the fibers insist on sticking their necks out.



Coon Dog Trials

• • by George F

THAT'S MUSIC IN PENNSYLVANIA HILLS when coon dogs hit the trails. The black and tans, blueticks and redbones will always continue to sing the old, time-honored songs over uplands or lowlands in the night. Coon hunting began more than 100 years ago in Kentucky, dogs come from long line originating in the pack of Col. H. C. Trigg of Kentucky in 1845. In coon dog trials official rules govern the mile course that speedy dogs negotiate in three minutes. Dogs that get to tree first but need not bark at treed coon are called "line" dogs. Dogs first to get to tree, must get feet on tree and bark are called "tree" dogs. Coon is never harmed. In trials there are three winners: 1st "line" dog, 2nd "line" dog and 1st "tree" dog. Handlers train, breed and hunt dogs as carefully as thoroughbred horses.



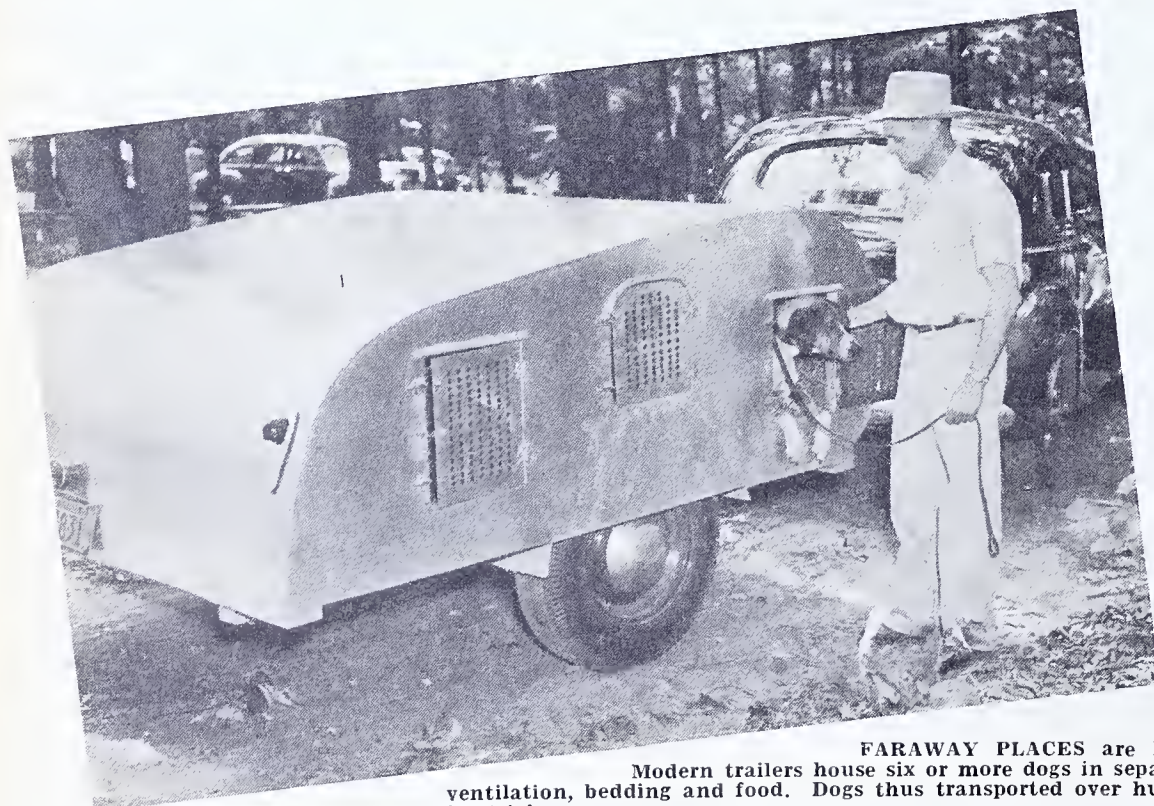
POST TIME coming up, crowd looks over entries much on favorites in various h



PLENTY OF DRAG is necessary to make lots of fresh coon scent over course prior to each heat. Bred with splendid noses, dogs have no trouble swiftly following right trail.

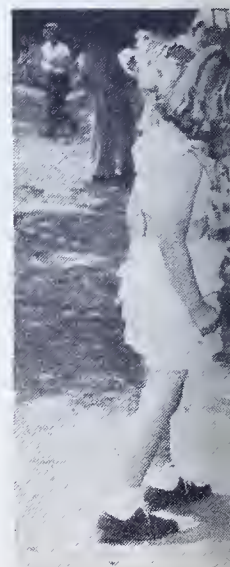


THEY'RE OFF . . . and though they rarely,



FARAWAY PLACES are home kennels for many entries. Modern trailers house six or more dogs in separate compartments, furnish good ventilation, bedding and food. Dogs thus transported over hundreds of miles are always fresh for trials.

FEET FIRST are important. Foot numbers are often painted





at race track commenting



BARKING UP THE RIGHT TREE . . . you can stake all you've got that Mr. Coon's there all right. Dogs hit tree hard with all fours, making six foot leaps.



, catch the coon, dogs can really stretch out

B'R COON himself comes down from his lofty wire cage long enough to talk over all this funny business with terrier. Terrier is satisfied to growl it over from outside the cage.



JUDGES TALLY UP scores on each heat but it's a tough and thankless job with no photo finishes to help decide winners.

ust be kept in top shape for mile grind. Entry dogs body to identify them in heats.





This is a true story and this is the bluebird that nested in the box the Outdoor Kids erected on the fence post.



OUTDOOR KIDS

By Hal H. Harrison

"SAY, Billy, isn't it time we put up that bluebird house?" asked Jane one evening as she and her brother, Billy, finished their studies.

"Holy cow, Jane, am I glad you thought of it," Billy declared. "We should have put that up a month ago. Why, bluebirds are back already and they'll be looking for nesting boxes anytime now."

"Where do you think we should put it?" his sister asked.

"Well, Mrs. Anderson at Pleasant Hill Farms was telling mother the other day that she and Mr. Anderson never see any bluebirds any more. I guess they sort of miss them. Maybe if we would put our box on a fence post near their house we could attract bluebirds for them," Billy suggested.

"You wouldn't want to put it that low, would you?" Jane asked, concerned over Billy's plan to put the box on a fence post.

"Sure, that's a good place," Billy informed her. "Pop says that people don't know where to put bird boxes after they make them. Sometimes they put boxes for nuthatches near the ground and bluebird boxes high in trees. It should be just the other way. A bluebird box should be placed about six feet from the ground."

"Where's that book we used to get the right dimensions when we built it?" asked Jane as she walked toward the bookcase.

"It's in there. It's 'Pennsylvania Birdlife,' and it gives the sizes of a lot of houses and tells just how big to make the openings and just how high the boxes should be placed. I'm going to follow the rules when I put up bird boxes."

The children talked about the bluebird box and their plans to erect it a little while longer and then they went to bed. They decided to go to Pleasant Hill Farms right after school the next day.

Billy had made the box as a Boy Scout project during the winter. Jane's help had been enlisted in finding lumber for the job. She had done well, too, for the ends of two apple boxes made a strong, weather-resistant house.

They were surprised that a bluebird did not demand a larger house, for the specifications . . . a 5 x 5 floor and an 8 inch cavity with the entrance 6 inches above the floor . . . seemed small. The 1½-inch entrance hole seemed about right to them, however.

(Continued on Page 25)



Bow Hunting Season Debate Highlights Federation Meeting

Lively discussions and close voting on the question of a special season for bow hunting highlighted the 19th Annual Meeting of the Pennsylvania Federation of Sportsmen's Clubs, held in Harrisburg on February 18. Resolutions introduced by the Southern and Northwest Divisions in the Panel Meetings on Friday afternoon were both dis-approved but at the Saturday morning session the bow hunting question was again brought before the delegates representing over 200,000 Pennsylvania sportsmen. In the voting which followed the first "voice" tally indicated that the resolution recommending to the Game Commission that a season for hunting deer with bow and arrow be established was approved, but a "roll call" vote showed that the delegates were evenly divided on the question, 28 to 28. The split constituted a rejection of the resolution under Federation by-laws.

The Federation approved other resolutions requesting that the mink and muskrat seasons run concurrently, that the Game Commission observe and recognize established Division lines of the Federation in any Division-wide studies, experiments, or programs, that all protection be removed from the skunk, that the wild turkey season be extended, that the raccoon season be from October 1st to January 31st and that there be no season limit, that a season be declared on antlered and antlerless deer concurrently, spike bucks remaining illegal, that the use of the .410 shotgun be prohibited in shooting big game, that turkeys be "tagged" in the same manner as deer, that the Game Commission employ more deputy game protectors during game season, and that the Game Commission request a split waterfowl season.

New officers elected at the meeting are as follows: President, S. Dale Furst, Jr., of Williamsport, succeeding Mr. R. S. Cooper of Connellsville; 1st Vice-President, J. H. Barkley, Punxsutawney; 2nd Vice-President, Ray Armstrong, Guys Mills; and Secretary-Treasurer, Dr. C. A. Mortimer, Honesdale. Hon. Grover C. Ladner, Philadelphia, was named Honorary President.

Conservation Society of York County

Publication of a colorful and interesting "Conservation News" bulletin was recently started by the Conservation Society of York County. The quarterly features articles of interest to all outdoorsmen and sportsmen, including articles on points of historical interest in the county, birdlife, farm forestry, water conservation, and gardening.

SPORTS CLUBS NOTICE

The Commission is anxious to have a complete file of all publications issued by Pennsylvania sports clubs weekly, monthly, quarterly or annually. Will editors or secretaries of clubs please mail sample copies of their magazines or pamphlets to Leo A. Luttringer, Jr., Chief, Conservation Education Department, Pennsylvania Game Commission, Harrisburg, Pa.

Blue Ridge Sportsmen

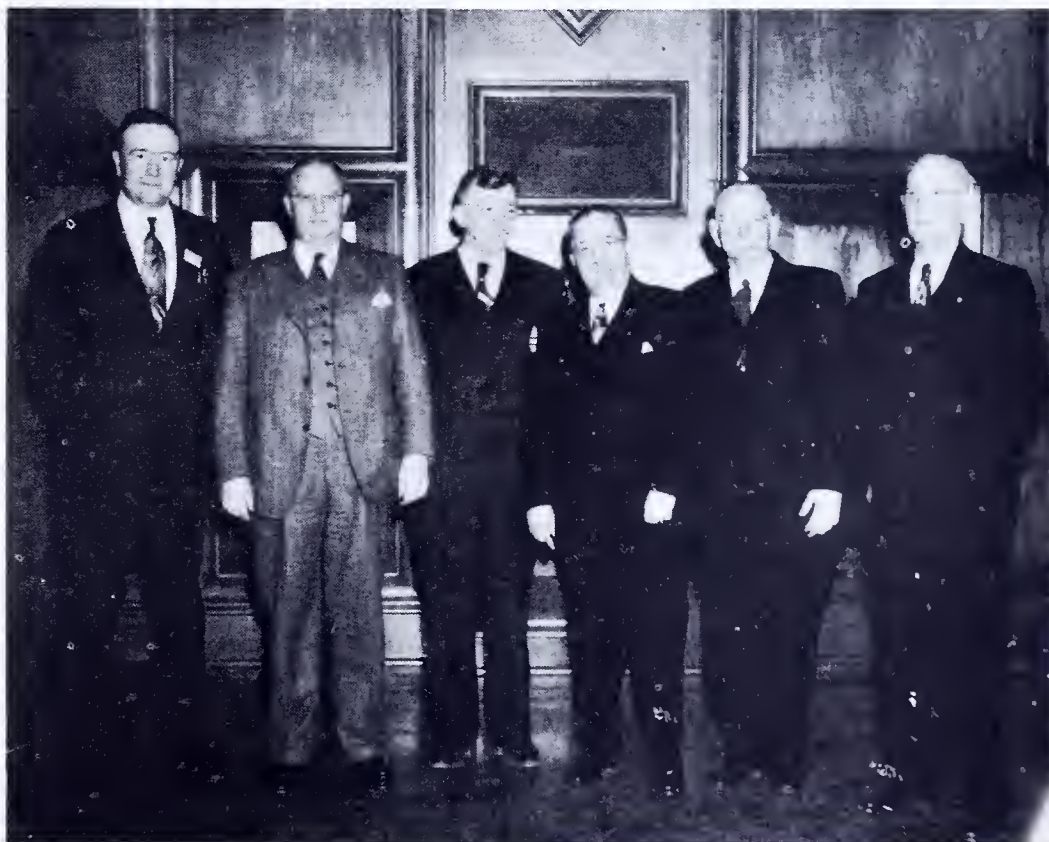
According to a detailed annual report compiled by Secretary G. Y. Cortright, the Blue Ridge Sportsmen's Assn. of Blue Ridge Summit had a busy year in 1949. The Association became a member club of the Franklin County Federation, constructed 3,000 feet of raising and holding pens for pheasants, held 12 general meetings during the year with an average attendance of 75, purchased a club farm of 92 acres in Liberty Township, Adams County, and, in general worked for the purposes outlined in their Constitution "to promote interest and seek improvement in all outdoor sports through the sponsorship of competitive teams, by teaching and practicing conservation and reforestation of woodlands, by engaging in the restocking of wild game and fish, and by encouraging friendly relations and mutual respect between the landowners and sportsmen."

Avella Sportsmen's Association

D. A. DeFilippis, Jr. was again elected president of the Avella Sportsmen's Association at the annual club banquet on February 15. He is now serving his sixth term as president of the club, which was first organized in 1945. The club sponsored two high school boys at the Junior Conservation Camp at State College last summer and is cooperating under the Game Commission's day-old pheasant chick program.

Lebanon County I.W.L.A.

The Lebanon County Chapter of the Izaak Walton League of America held their third annual Sportsmen's Show in Lebanon in mid-March. Highlighting the four-day affair were nationally known outdoor entertainers including Chester Francisco, wood-chopper in a local chopping contest, the Pennsylvania State Police trained dog exhibition, Dashington's Animal Circus, and the International Rollos, roller skating artists.



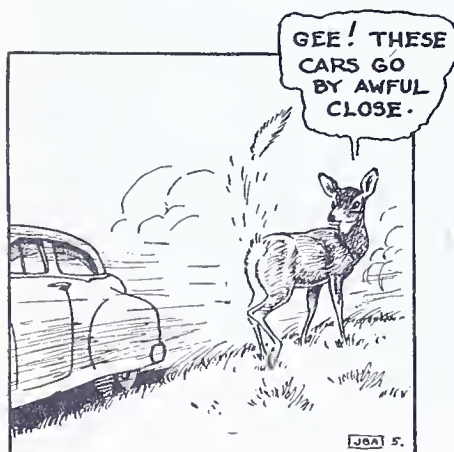
Newly elected officers of the Pennsylvania Federation are, left to right: Ray Armstrong, Second Vice-President; S. Dale Furst, President; J. H. Barkley, First Vice-President; Dr. C. A. Mortimer, Secretary-Treasurer; Merrill Merritts, National Wildlife Federation Representative; and R. S. Cooper, retiring President.



I had an unusual experience on January 12. While assisting Game Protector Les Haney with filling feeding shelters in Refuge 54-B, Haney took a stick and began to hammer on the shelter. In less time that it takes to tell it, 18 deer came bounding in from all directions. They came within 10 feet of us. The reason I think this was so unusual was due to the fact that an antlerless deer season had just closed when it wouldn't have been safe for one of them to move. Not one of these deer had visible antlers.—Game Protector Ed Richards, Portland Mills.

In checking muskrat pelts and contacting trappers during the recent muskrat season, I found that only a very small percent of the rats trapped were females. Two trappers in the Valier section kept an accurate check and found that they had only taken four females in a total of ninety-five rats. I checked a pack of rat hides at a fur dealer's office and found 17 males, 5 females.—Game Protector George Dieffenderfer, Punxsutawney.

This is the "tail" of a deer. One night in January a Mr. Hill from Kushequa called and said that his wife had just hit a deer with their car. When I arrived at the scene, all that I found was some hair and the tail of the deer lying on the side of the road. I picked the tail up and found that it had been severed close to the body, but the deer was nowhere to be found. That is one deer that won't try to flag any more cars.—Game Protector Bill Carpenter, Mt. Jewett.



On January 10th I attended a meeting of the Evans City Sportsmen's Club and during the meeting Mr. Charles Hanneman of Callery told me there was a litter of young rabbits under his back porch. He judged them to be about two weeks old. This is the first time I have ever heard of a litter of rabbits this early in the year.—Game Protector George Miller, Evans City.

One day in January while on foot patrol on Game Lands 95, I discovered the feathers and other remains of a partly eaten grouse. Evidently the grouse had been killed recently by some animal; therefore, I set a trap near the remains. The next day a large skunk was caught in the trap. Of course, it is not certain that the skunk actually killed the grouse but I do believe the fox (although a predator) is accused of much predation actually done by other animals.—Game Protector Woody Portzline, Slippery Rock.

I do not know of a Game Lands that could be doing much better in the way of providing both hunting and trapping than State Game Lands 213. This area not only produces good ringneck and duck hunting but also gives the trapper a fertile ground. Over 2,000 muskrats have been taken from it this year. Before the Commission took over the land, 90 percent of it was posted against hunting and trapping.—Game Protector George Keppler, Meadville.

Mr. Joseph Himmelsbach, a cooperator on Farm-Game Project 72, brought in the carcass of a freshly killed weasel for examination during January. Upon the right front leg, between the knee and hip joint and on the front section, a kind of sac was plainly visible. It was about an inch long and a quarter inch wide, semi-transparent in appearance, and contained a watery fluid and a worm. Cutting it open, we extracted the worm which was white in color, about as thick as a cord string, about eight inches long, and tapered on both ends. It was quite dead. In talking with other trappers I find that about twenty-five percent of the weasels caught by them this year were similarly affected.—Game Protector Clair Dinger, Albion.

Late in November, 1949, a sportsman living near Estella lost a foxhound by death due to rabies, having contracted the disease from a gray fox. In January I learned that this hound had been in the habit of eating the carcasses of the foxes. As it was reported to me, the dog had eaten a carcass and appeared to be quite sick the next day. A veterinarian, on examining the dog, was not certain at that time whether the dog was suffering from rabies or from laryngitis. Some hours later, however, the dog died. The head was sent off for examination and it was determined that rabies had been the cause of death. This case was one of those in which the mouth and throat are paralyzed somewhat, and it is not as dangerous as the violent type since the dog is unable to bite.—Game Protector Martin Shaffer, Leroy.

Goodrite z.a.c. with its adhesive Goodrite p.e.p.s. has been used to good advantage to repel deer and alleviate deer damage in the Bushkill Area in this District. At Unity House deer, which had been drawn into the vicinity of ornamental flower beds by salt, had grazed these beds and left nothing but stubble of the petunias. An application of the above chemicals drove off the deer and the plants later came on to make a beautiful showing against the small pool in the center of the bed. It is believed that this chemical is the answer for deer damage to the small gardner and trucker.—Game Protector John Lohmann, Milford.

In June, 1949, Mr. William Waldeisen, owner of the Narrow Fabric Company of Williamsport, purchased two peafowl from a propagator in Iowa. They were of the blue Indian phase. The day these birds arrived at Mr. Waldeisen's summer estate near Barbours, Lycoming County, they escaped while being transferred from their shipping containers to pens. Since that time they have been seen in various places and always appeared very wild. It now appears they have settled down on State Game Lands 134 in the vicinity of Camp Mountain and are apparently doing alright.—Game Protector Levi R. Whippo, Williamsport.





In January the P. P. & L. office at Millersburg phoned me to call attention to the fact that a Pileated Woodpecker was raising havoc with their light poles. The Power Company has just completed a new line from Sunbury to Millersburg and where the line crosses the Mahantango Mountain, it seems that this woodpecker has gone to work on the new poles. The bird even succeeded in drilling holes in two poles to the extent that they had to be replaced. What a pileated could be searching for in creosoted pine poles is beyond me but he is doing a good job of it, nevertheless.—Game Protector Harold Harter, Millersburg.

At times I am amazed at the common sense shown by dumb animals. While chatting with a trapper one day in January, he told how he had rescued a badly winded deer from a pack of dogs. After checking a few of his traps, he noticed that the same deer was following him. At times the animal would utter a loud "Baaaa," no doubt trying to vocally express its appreciation.—Game Protector Ralph Shank, Uwchland.

Mr. William Haun of Honesdale stopped at my headquarters recently and gave me this story: His wife was awakened at 5 A. M. on January 16 by a commotion in the chicken coop. She went out to investigate and saw what first appeared to be their small red dog. She soon discovered, however, that it really was a red fox. The fox grabbed the woman by the hem of her dress and held on until she hit it with the flashlight she was carrying. She then made a hasty retreat for the house.—Game Protector Ted Schafer, Honesdale.



Harry Mitchell of Cambridge Springs and a cooperator on Farm-Game Project 82 called me in January and asked that I come to see him. When I arrived at his farm, he told me quite a story of the depredations of a mink. He had what he thought was a vermin proof poultry house but was much surprised to find 28 hens killed one morning. Just 10 hens remained alive from a flock of 38. Mr. Mitchell, in desperation, put the remaining birds in a building adjacent to the first. This place, he thought, was inaccessible to even a weasel. The next morning the remaining 10 hens were found dead with teeth marks on their necks.

Mr. Mitchell set a number of traps near the dead hens and covered them with litter. The next morning he found a large male mink held fast by two traps. In killing the first lot of hens, the mink found entry through a small hole in a window. To kill the remainder of the flock, he had to climb the side of the first building, cross the roof, and climb the side of the barn to a window with a corner broken out. From here he was able to go down inside the building and kill the last 10 hens.—Game Protector Elmer Simpson, Cambridge Springs.



Mr. H. B. Kreisher, R. D. 1, Lewisburg, Union County who is a ringneck pheasant propagator has a hen that lays eggs and carries typical hen plumage during the summer months. After she molts in early fall, however, her new plumage is bright like that of a cock bird and, except for a lack of red around the eyes, the hen carries all the markings of the male pheasant.—Game Protector Ray Holtzapple, Middleburg.

Have you ever heard of a talking crow? I have and now I have one. A woman in the vicinity of the salt road near Summerdale called in January and reported a partly tamed crow was going around drilling holes in milk bottle tops and was drinking the milk. Would I please come and get it? I did and found its wing and tail feathers were cut very short so I decided to make a cage and keep it. Now, after hearing my daughter, wife, and myself talking, the bird calls "Paul," "Barbara," and "Joe," says "hello," and laughs. Of course, just when you want to show him off, he won't even caw.—Game Protector Clint Ganster, Marysville.



One afternoon while in the Slate Run Country during the last week of January, I was driving along one of the dirt roads hugging the side of a mountain, enjoying the steep ruggedness of this country. The day was unusually warm and so the windows of my car were down. As I was slowly plowing through the muddy road, I heard suddenly to my left and behind me the whistle of wings. I instinctively glanced around and, there, bearing down on me was a huge bird. It reminded me of a P-51 doing a strafing job. As this bird got within good shotgun range, it made a beautiful chandell to the left, giving me an excellent opportunity to observe the markings and coloration. I had my field glasses on it by then and was out of my car. As it circled me two more times, I could study the detail of its plumage and form. Then, with several powerful wing beats, it took advantage of the air currents over the steep mountains and soared high into the wild blue yonder until it was but a black dot in the sky—away from all the trials and tribulations of all us ground creatures. I identified this monarch of the skies as a Golden Eagle.—Land Utilization Assistant John Gehron, Division "C," Williamsport.

While patrolling a small stream near Broughton on January 23, I noticed the bank of the stream was all scratched up. Knowing there were no chickens in the vicinity, I began scouting around and soon raised two ringnecks. The muskrat trappers were using corn for bait and the ringnecks were stealing it.—Game Protector Robert Rea, Canonsburg.





A BACKING LESSON

By Herbert Kendrick

HONORING the brace mate's find is not only regarded as an act of refinement in the field but is an essential qualification of the finished gun dog. This act of courtesy is to be taught, encouraged, and forced, if necessary, in all pointing dogs. In the eagerness to find game it is a natural tendency of a young dog to exert every effort to make a find, even if it means stealing it from his mate already on point. This act of jealousy has no place in the hunting field, and from the very beginning the dog must be taught to back staunchly. No matter how good a nose he may possess, nor how careful he may be, the hazards of flushing game are always present when he creeps past a pointing dog. One of the great thrills of upland game shooting is produced by the fine performance of well-mannered dogs, and the deep satisfaction of seeing one dog courteously honor the other is well worth the time and trouble required for the training.

While at an early stage of training the puppy may back naturally; but at a later date the same animal may forget these early actions, and deliberately refuse to back. If this should occur it is time to cure him once and for all. The trainer cannot become careless for a moment and hope the dog will not repeat the act. If he is allowed to get by with it, he will invariably repeat it, and the task of correcting him will always be greater.

In teaching the young dog to back it is an invaluable aid to have an experienced brace mate along. The older dog finds game without difficulty, and will remain staunch long enough to give the young hopeful a satisfactory lesson. The pup's attention is attracted to the dog on point, his jealousies are not yet aroused, and it is natural for him to attempt to imitate his more experienced superior.

When he shows signs of backing, be very careful to show your approval. Give more attention to the young dog than to the older one on point. Stroke him gently, speak to him encouragingly and let him know he is pleasing you. His feeling of importance will grow with each lesson, and he will feel that backing is just as important as pointing itself. Leave the older dog on point for a long time, and keep the pup backing until he thoroughly understands his position. When he begins to tire, walk in and flush the game.

While teaching a young dog to back you are laying important groundwork for teaching to point and to remain steady to wing and shot. Teaching to back is not a difficult task; however, it does take time. One lesson is never enough. It must be repeated often and long enough that near perfection is acquired. Each time an error is committed he should be taken back to the spot and made to accept correction there.

If the pupil does not back naturally at sight, then the use of a check cord is necessary. The procedure is the same except that you have better control over him. Hold the end of the cord and

(Continued on Page 32)

THE HANDGUN IS A GOOD BET

PART TWO

By Ed Shearer

LAST month we covered the stance and proper hold of the handgun. Also some of the causes and effects of some factors the beginner first encounters. The next step and the most important in my opinion is the alignment of the sights. In no other form of shooting is the correct alignment of sights so vital to accuracy. This is due primarily to the short sight radius of the hand gun. Let us look at what happens with this short sight radius when even a small fractional error occurs. Suppose you are shooting a six inch barrel revolver. Any error of alignment will be 257 times as great at 50 yards because 50 yards is 1800 inches, and that is 257 times the sight radius of the six inch barrel. Now take some of our automatic target pistols such as the Colt Woodsman which has a nine inch sight radius. This works out that the errors are 200 times greater at 50 yards than at the muzzle. Now take the average sporting rifle with tang aperture sights or the modern bolt action sporter with receiver rear sights. The average sight radius is 30 inches. Here we find that any error of alignment of sights is reduced to 60 times as great at 50 yards, as at the muzzle.

Let us take a look at how this works out on the target. If one keeps his sights in alignment with each other, he can still hit an eight inch bullseye at 50 yards, even if his point of aim is as much as four inches away from the aiming point for a perfect pin wheel ten. That means an error of over one sixteenth at the muzzle of the gun. But if the sights are out of alignment by only .015 of an inch, the best you can get is just a nip on the eight inch circle.

The first requirement to get the perfect alignment is to be able to see the sights clearly. Very few shooters can detect an error of one hundredth of an inch, if the black sights are against a black background such as a bullseye, or if they are surrounded by a halo of fuzz that results from focusing on the bullseye and trying to see the sights at the same time. It is the most natural thing for the shooter to focus his eyes on the bullseye as that is what he is trying to hit. Right here is where much of our poor shooting starts. It may be possible for a very few to see the sights clearly at 25 yards when the aiming point is the center of a black bullseye. Most shooters will find that even at this range better shooting will result if the sights are seen against the white paper. So probably the best point of aim is the Six O'clock hold. The front sight is square in the middle of the notch of the back sight and their tops exactly even, and aligned so that a thin strip of white shows between the bottom of the bull and the top of the front sight. The sights are adjusted so the shot goes high into the center of the bullseye. You will be able to hold more constant and be less bothered by fuzzy sights. This is the conventional target hold and is used by most target shots. The front sight should be fairly

(Continued on Page 26)



The afternoon of February 3, in the packed courtroom of the Potter County Courthouse at Coudersport, Pa., representative farmers, other property owners, Game Commission officials, legislators, and leading sportsmen met for three hours seeking a solution to the serious condition resulting from destruction caused by deer, still said to be far too numerous in that county. There was no discussion on Game Law amendments affecting deer, inasmuch as the General Assembly will not meet until 1951.

Numerous farmers and property owners cited sizeable losses—some of them borne for years—in grains, clover, potatoes, strawberries, fruit trees, and evergreens. Nearly all of the complainants asked only that the herd be reduced and controlled, expressing opposition to any thought of its extermination. Several stated that they, too, enjoyed hunting, that they welcomed the right type of deer hunter to Potter County. A delegation of farmers from Cameron County, present at the meeting, offered to join forces

Farmers, Commission, Sportsmen Meet on Deer Problem

with their Potter County neighbors to help find the answer to the deer damage problem.

Judge Robert R. Lewis, Potter County jurist, stated that in his opinion the solution lay largely in proper forest management for wildlife in the section affected. The local District Forester told what the Department of Forests and Waters has done on its lands in the county. Attorney Joseph P. Willson, Smethport, a member of the Pennsylvania Game Commission, related his interest in the deer situation in northern counties and cited provisions of present game law by which both property owners and the Commission are restricted. Tom Frye, Executive Director of the Game Commission, assured the complainants that the Commission would cooperate and do everything within its power to assist in bringing about a solution to the Potter County deer trouble.

Deputy Attorney General H. Albert Lehman, the Commission's official advisor, complimented the group on their sensible and orderly approach to the issue and referred to the meeting as a fine example demonstrating how law abiding citizens solve their problems in an orderly fashion. Representative E. W. Tompkins, vice-chairman of the Northcentral Division of the Pennsylvania Federation of Sportsmen's Clubs, expressed his organization's desire for continued deer hunting but its interest also in the welfare of its farmer friends. State Senator James S. Berger and State Representative Wrayburn B. Hall were introduced to the assemblage.

Before the meeting was concluded, it was agreed that a farmer committee elected at the gathering would meet with a representative of the Game Commission, one from the Department of Forests and Waters, one from the organized sportsmen, perhaps others, to determine the best immediate approach to Potter County's deer problem.

At this orderly protest meeting, fairness and restraint ruled. Long-suffering people asked only that they be relieved of unnecessary, frequently considerable, financial loss by deer. There was little indication that the law protecting deer that menace Potter County farmers' livelihood would be broken if their demands were not met. Those present seemed confident that when representatives of all concerned joined in discussing the common problem a workable solution would be found. What a lesson this meeting would have been to those who talk against the "American Way." Here was exemplified "democracy at work!"

LOST

Beagle, Male, at Red Rock, Sullivan County. Color: Black, White and Tan. Answers to the name of "Skip." Reward. Notify Al Wasko, 16 N. Carbon St., Shenandoah.

Rabbit hound, about 3 years old, male. Color: Black, white and tan. 1949 License tag—Allegheny County No. 21003. Lost in the vicinity of Sigel during snowshoe rabbit season. Reward. Please notify Willis A. Golla, 218 Kittanning Street, Etna or phone collect Sterling 1-2678 (Pittsburgh).

.35 Remington. Will Ambridge hunter who drove Mt. Lebanon hunter and doe deer from Pottersdale to Cameron County Firetower Camp on December 10 please notify Mr. Bernard H. Lawson, 125 First Avenue, Pittsburgh 22.

PENNSYLVANIA GAME COMMISSION
Official 1949 Game Kill

Species	Average Wt. of Ea.	Season of 1949*		Season of 1948*	
		Number	Weight	Number	Weight
Deer, Legal Antlered	115 Lbs.	46,602	5,359,230 Lbs.	33,608	3,864,920 Lbs.
Deer, Legal Antlerless	80 Lbs.	84,121	6,729,680 Lbs.	.....	.....
Total Deer and Weight ..		130,723	12,088,910 Lbs.	33,608	3,864,920 Lbs.
Bears	175 Lbs.	411	71,925 Lbs.	388	67,900 Lbs.
Rabbits	13 1/4 Lbs.	1,860,436	3,255,763 Lbs.	1,791,550	3,135,212 Lbs.
Hares (Snowshoes)	3 Lbs.	5,948	17,844 Lbs.	5,616	16,848 Lbs.
Hungarian Partridges	12 Oz.	92	69 Lbs.	43	32 Lbs.
Squirrels	1 Lb.	578,267	578,267 Lbs.	564,873	564,873 Lbs.
Raccoons	10 Lbs.	81,007	810,070 Lbs.	98,242	982,420 Lbs.
Wild Turkeys	10 Lbs.	6,885	68,850 Lbs.	4,318	43,180 Lbs.
Ruffed Grouse	1 1/4 Lbs.	36,304	48,405 Lbs.	24,297	32,396 Lbs.
Ringneck Pheasants	2 3/4 Lbs.	343,767	945,359 Lbs.	277,254	762,448 Lbs.
Quail	6 Oz.	5,181	1,943 Lbs.	5,780	2,168 Lbs.
Woodcocks	6 Oz.	26,748	10,030 Lbs.	26,210	9,829 Lbs.
Rails, Gallinules & Coots ..	4 Oz.	6,041	1,510 Lbs.	3,960	990 Lbs.
Grackles (Blackbirds)	2 1/2 Oz.	(Unprotected—No data)	(Unprotected—No data)	(Unprotected—No data)	(Unprotected—No data)
Wild Waterfowl	2 1/2 Lbs.	59,103	147,757 Lbs.	40,352	100,880 Lbs.
Woodchucks	6 Lbs.	265,135	1,590,810 Lbs.	259,534	1,557,204 Lbs.
Doves	3 Oz.	10,840	2,033 Lbs.	6,847	1,284 Lbs.
Total Number and Weight		3,416,888	19,639,545 Lbs.	3,142,872	11,142,584 Lbs.
Reduced to Tons Equals			9,820 Tons		5,571 Tons

* Small Game, based on Field Officers estimates; Big Game, based on individual reports filed by hunters.

PRELIMINARY REPORT ON 1949 HUNTING ACCIDENTS

	Fatal	Non-Fatal	Total
Small Game	19	396	415
Big Game	6	58	64
Total	25	454	479



Photo Courtesy Clearfield Progress

Scenes such as this one along the Rockton Road in Clearfield County followed the wake of one of the worst ice storms to hit northern Pennsylvania. The storm, which swept northern tier counties in mid-February, caused tremendous damage to trees and telephone wires but, contrary to popular belief, did not greatly harm wildlife.

Disease Threatens Extinction of Oaks

A deadly tree disease, the potential destructive power of which could make our worst forest fires seem like backyard brush blazes, is ravaging woodlands in the Midwest, according to the Wildlife Management Institute.

Oak wilt, caused by a fungus bearing the ominous-sounding name *Chalara quercina*, apparently attacks all species of oaks, and some, such as the red oak, die within 30 to 60 days after symptoms are first noted. The stately white oak is more resistant but it, too, succumbs within a few years after the characteristic stiffening of upper leaves begins. The fungus spreads centrifugally through the interlacing root system of individual stands, but is capable of leaping considerable distances from one stand to another. No cure has been discovered, although prompt removal of diseased trees can help confine it or slow its spread.

The disease was found locally in the upper Mississippi Valley about 20 years ago, and it has spread each year, slowly but perceptibly gaining momentum. Its accelerating march southward and eastward is causing foresters and botanists growing concern, for its range now extends across southern Wisconsin, southeastern Minnesota, eastern Iowa, northwestern Indiana, northern Illinois, and through 10 counties in Missouri. Although studies and control work are being carried on by the various states and by the Bureau of Plant Industry, Soils, and Agricultural Engineering of the U. S. Department of Agriculture, much more research and field work must be done if the disease is to be checked. Federal funds earmarked for this purpose are needed.

NOTICE ON BOUNTY RATES

(Excerpt from Official Minutes of January 12, 1950)

RESOLUTIONS

WHEREAS, After giving due consideration to the present predator population;

THEREFORE, BE IT RESOLVED, That the Pennsylvania Game Commission, acting under the power and authority vested in it by the provisions of Article XI, Section 1101, of the Game Law, by resolution adopted this twelfth day of January, 1950, hereby continues from June 1, 1950 to May 31, 1951, both dates inclusive, the bounty payments currently authorized for the birds and animals enumerated below, if killed in a wild state in any county of the Commonwealth during the period specified and presented in the manner and under the conditions stipulated in the Act aforesaid, except that no bounty shall be paid for gray foxes killed in the counties of Chester and Delaware (where a special Act of the General Assembly restricts the killing of foxes to the protection of personal property), the rates of payment to be as follows:

1. Gray Fox—\$4.00 for each gray fox, except as indicated.
2. Weasel—\$1.00 for each weasel.
3. Great-horned Owl—\$5.00 for each adult great-horned owl, and \$2.50 for fledgling which has not left the nest.
4. Goshawk—\$5.00 for each adult goshawk and \$2.50 for fledgling which has not left the nest.

BE IT FURTHER RESOLVED,

That if and when by Act of Assembly, decision of the Court, or opinion of the Department of Justice, it shall be held lawful to kill foxes in Chester County and/or Delaware County for bounty purposes, that the bounty payable therefor shall be as herein provided; and

BE IT FURTHER RESOLVED,

That the foregoing resolution shall be duly published in accordance with Section 1102 of Article XI of the Act aforesaid in the March and April issues of the Pennsylvania Game News, also to be brought to the attention of the public by news release and other sources of public information; and

BE IT FURTHER RESOLVED,

That the Executive Director is hereby authorized and directed to certify the foregoing as an act of the Pennsylvania Game Commission.

I hereby certify the above to be a full, true and correct copy of the resolutions establishing bounties on certain predators killed in a wild state within the Commonwealth from June 1, 1950 to May 31, 1951, inclusive, as adopted by the Pennsylvania Game Commission at a meeting held January 12, 1950, notice of which action is published in accordance with the requirement of law.

Thos. D. Frye,
Executive Director
Pennsylvania Game Commission

BLACK ROWDY—

from Page 5

Rye Crisp was used here! The mother's condition is so far from comatose that she cares for her cubs with much concern, snuggling them up to her fur for warmth and defending them vigorously from intruders. Robert Leiter, Game Commission photographer, found this out at the Clinton County den.

The brown or cinnamon bear is just a color phase and appears in a black bear's litter. Cinnamons are rare in the east and there are few Pennsylvania records. Two were reported from Tioga County in 1931 and one was recorded killed in Monroe County. In the Rocky Mountain States brown bears are as common as blacks and there was a honey-colored variety that ranged the low country of Wyoming and was regarded with superstition by the plains Indians. They called it the Sun Bear. They were never seen larger than two-year-olds and the early white settlers considered them a distinct race of small bears. In 1904 Seton (*Lives of Game Animals*) saw one of these taffy-colored bears mounted in Manitoba. He says, "It was everywhere of a pale straw or golden color, with chocolate-colored face and legs; yet it was clearly of Blackbear species."

Another rare color phase of the black bear is the Glacier Bear or Blue Bear. Most of the recorded specimens have come from the Cape St. Elias region of the northern Alaskan coast, a land of huge glaciers. Kermode's Bear, from the coast of British Columbia, is regarded by some mammalogists as the only albinistic form of the black bear. It is a small, white bear with modified cranial characteristics of the black bear.

Besides in size and color, black bears are distinguished from grizzlies by their straight or nearly convex facial contour and by the short, curved claws on their front feet. The grizzly's distinctive characteristics are his concave profile with a high sagittal crest, the heavily-furred hump above the shoulder muscles and the very long, only slightly-curved claws of his forepaws. There are, too, diagnostic differences in dentition between the two species.

Like all bears, the black bear plants his whole foot on the ground and does not walk on the ball of the foot as do most animals.



He is a good tree-climber and, in this ability, again differs from his cousin the grizzly, who is too heavy to climb trees.

For centuries bears have caught men's interest throughout the world—probably more so than has any other animal. Folk-lore, fables, legends, fiction, and adventure tales are full of bear episodes. Countries, States, colleges and schools have chosen bears for their emblems. Artists have painted them from the time that the Reindeer Hunters first scratched outlines of cave bears on the

walls of the caverns of Les Combarelles, 20,000 years ago. America's greatest animal draughtsman, Charles Livingston Bull, whose untimely death in 1932 left a space in the field impossible to fill, made many magnificent bear illustrations. Carl Rungius, still vigorous in his early eighties, and without a peer in the portrayal of big game in its natural environment, has made some unforgettable paintings of grizzlies in the high country of British Columbia and Alaska. Paul Bransom's illustrations of black bears are the best we see in this country today.

OUTDOOR KIDS—from Page 18

They were talking about bluebirds again the next day enroute to the farm.

"I checked up with Pop again on putting the box on a fence post," Billy said, "and he told me it was OK. In fact, he said that he knew of a man in Illinois who put up a lot of bluebird boxes on fences along country roads and attracted 88 pairs in one year."

"Gee, that's a lot of bluebirds. Well, we should be able to attract one pair to our box for the Andersons then," Jane commented.

"Maybe!" Billy replied quickly.

"Why do you say 'maybe'?" Jane asked.

"Well, bluebirds don't have it so easy," her brother explained. "To begin with they have to fight house wrens, English sparrows and starlings for the right to

nest in a box. After that, they have to keep on fighting to hold the box.

"Everybody thinks that wrens are so cute, but Pop says that they are sometimes pretty mean," Billy continued. "He says that if they get a chance they will puncture the eggs of other birds around them by jabbing the end of their bill through the shell."

The children placed their home-made box at the top of a post at the corner of a fence as their big setter, Pal, sat watching them at work.

On April 17 they found a bluebird incubating five eggs in their house, and one Sunday afternoon in May they had the joy of seeing five little bluebirds leave home.

They were so delighted that they resolved to make more boxes and place them all over the farm next year.

GOING—GOING—GONE—from Page 2

and the annual growth is 35,300 million board feet—a deficit of almost 40 per cent, at a time when countless Americans are still looking for places to live. Our cut-over timberlands are littered with slash, where no tree grows. Careless forest fires take a yearly toll of lumber sufficient to build an entire modern city.

Our soil is going. "In the short life of our country," Dr. Hugh Bennett, chief of the U. S. Soil Conservation Service, testified before a Congressional committee, "we have destroyed 282,000,000 acres of land which we cannot replace. Erosion is actively destroying 775,000,000 additional acres." If a newspaper reporter stood on the banks of the Mississippi River and saw a herd of a hundred cattle, a flock of sheep and goats, a barnyard full of chickens, a carload of fruit and vegetables, and a silo filled with grain go drifting past him, it would make all the front pages. But, unnoticed, the equivalent of a 1,000 acre farm floats down the Mississippi every 24 hours: lost to us forever. It takes nature up to 1,000 years to restore one inch of topsoil; yet more than half a billion tons of irreplaceable soil are swept down the Potomac River—past the halls of Congress—each and every year.

Our waters are going: ruined by criminal pollution. We laugh at the Chinese who spread their human waste on the fields. We are more civilized; we dump it in our drinking water. Chicago, Detroit and other cities pour their offal directly into the Great Lakes or the Mississippi.

Our wildlife is going, going, and—in the foreseeable future—will be gone. Darwin said in his "On the Origin of Species" in 1859: "The plenitude of life in any place is dependent on the terrain and food and cover." These are the very things that the land of man has destroyed. Ever since the first human crept out of the first cave and knocked over the first animal with his spear, we have been upsetting nature's balance more and more. Industrial plants have leveled forest areas, used up the space that once provided food for birds and animals, poisoned through their refuse the surrounding waters where fish and waterfowl once lived. We have taken, but we have not put back. Our controls have been haphazard, too often dictated by politics or selfish interests.

We should provide better conditions for what remains of our wildlife. We do not agree with the sentimentalists who would ban all hunting and fishing—unless they go all the way, and ban power dams and industry as well. Rather, the sportsmen, being the most interested, should be enlisted as the most ardent crusaders. Man, a predator, can help restore nature's balance by fighting other predators who are in competition with man, such as the voracious crow—one crow destroys 20 songbird eggs and fledglings per year—the great horned owl, the goshawk and sharpshinned and Cooper's hawk, such predatory fish as the carp and gar, and wildlife's public enemy number one: the prowling, uncontrolled house cat. He can work to restore the former habitat of fish and game by building wing-dams on streams, by reclaiming barren land, by planting such excellent food and cover providers as grasses, bittersweet, lespedeza, the multiflora rose.

THE HANDGUN IS A GOOD BET—from Page 22

wide with the notch of good width. This helps to eliminate fuzziness and reduces eye strain.

The alternate method and one universally used by the outdoorsman who wants to bust bottles and cans or add some small game to the pot, is to have the point of impact strike where the top of the front rests.

Now we come to the trigger squeeze which next to the alignment of sights is the most important factor in hand gun shooting. When you have these two things down pat, you are well on the road to success. In the actual trigger release there are two accepted correct methods. There are plenty of arguments in favor of both so let us look at the good and bad points of each.

One method is to increase the pressure on the trigger when the sights are right, and hold it when they are not. Then the gun goes off UNEXPECTEDLY when the sights are on. Theoretically, at least, it cannot go off at any other time on account of pressure being applied only when the sights line up. Since the shooter does not know the exact instant the gun goes off, he cannot get set to do a flinch. This method is the best bet for a beginner and for all shooters of the larger calibers who only shoot occasionally. To use any other method is to invite a flinch, which we will talk about later on. This is the system the army uses and with good reason. Here the recruit is started right in with the 45 Automatic with its severe muzzle blast and twisting recoil. Add to this a creepy trigger pull which makes you sweat each shot out—and that is the reason most army pistol coaches have gray hair.

The disadvantages of this method of trigger squeeze are it tends to make the shooter slow and deliberate—sometimes poky. This will work out in straight target shooting but defeats the real purpose of the handgun, which is to substitute for the rifle when it is undesirable to carry it. Consequently the target a good part of the time will be either moving or ready to move unexpectedly. Then there are times of changing light, bad shooting position, being out of breath, etc., that makes the slow squeeze a poor bet. However it's the best way for a beginner regardless of the caliber he uses.

The second method is the one most experts use. That is the direct opposite of the first—that is to know when the gun is going off. This means that you must know the trigger pull of the gun so well that you can take up all of the pull except the last couple of ounces, and squeeze those ounces off when the sights look good. This is the method that practically all fine offhand rifle shots use. But here you have two hands plus a stock against the shoulder and a much heavier gun to slow down the motion. Yes, it takes plenty of practice. The main thing with either is to take up at least some of the slack and squeeze out the rest when the sights look right.

Flinch is another factor to beware of. It can happen to even experienced shooters under certain conditions. Even the .22 caliber has quite a report in the short barrel and the roar of the 44's and .45 calibers are awe inspiring to the beginner. The best way to get rid of a flinch is to go back to the .22 caliber. Have a friend load the gun for you omitting some of the time to put a shell under the hammer. A flinch will show up immediately. It is soon cured with the light gun as you feel sort of silly straining away, finally jerking the trigger and nothing happens.

Now that we have covered most of the gremlins that plague the beginner, there is one more thing in conclusion. Don't make the mistake of starting with anything larger than a .22 caliber. It takes time to become acquainted with the muzzle blast and recoil of the large caliber. Unless your income is in the higher brackets you will not do enough shooting to get good. Dry practice is not enough with the hand gun though it helps. Spark photographs show there is some barrel movement during the passage of the bullet. So it follows that enough shooting must be done to make the movement constant.

Now as the milk cow said to the farmer, "Here it is, there is the pail, the rest is up to you."

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of February, 1950

ADAMS—\$10.00	
Laughman, Albert Pius, R. D. No. 3, Hanover. Digging out muskrat den	\$10.00
ALLEGHENY—\$665.00	
Adams, Ashton Abraham, 604 McNeilly Road, Pittsburgh 16. Making false statement to secure hunting license for another	20.00
Andriske, Michale, House 85, Large. Failure to tag one trap	10.00
Brinsky, Robert Thomas, 65 Pickwick Drive, Bethel Bore. Disturbing traps of another	25.00
Caldwell, William White, Box 144, Renton. Attempting to kill rabbits in close season	10.00
DeRoy, Anthony Dominic, R. D. No. 1, McDonald. Removing one spruce tree from state game lands	25.00
Horrell, Owen Clayton, R. D. No. 1, Apollo. Possessing loaded rifle in vehicle along highway	10.00
Melhorn, Frank Herman, 3576 Middleboro Rd., Castle Shannon. Training dogs on game while carrying rifle	10.00
Muse, Stanley Joseph, 3945 Mintwood St., Pittsburgh. Possessing the skins of ten muskrats unlawfully taken in close season	100.00
Nagy, Zigmund Zalter, Box 101, Renton. Attempting to kill rabbits in close season	10.00
Robertson, LeRoy Travers, 1812 A. St., Pittsburgh 12. Possessing elk in close season	100.00
Stephens, Roscoe William, Brant Ave., Ingomar. Killing male deer in closed season	100.00
Swisher, Charles Oliver, 1001 Carson St., Pittsburgh 3. Hunting without resident license	20.00
Watkins, Richard, 149 Boundary St., Clairton. Failure to report shooting accident causing injury to another	25.00
Zolnowski, Chester Richard, 502 Blessing St., Pittsburgh 19. Killing doe deer in close season	100.00
ARMSTRONG—\$360.00	
Allen, Charles Albert, R. D. No. 1, Vandergrift. Failure to produce the head of deer upon demand	100.00
Allen, James Leroy, R. D. No. 1, Vandergrift. Failure to produce the head of deer upon demand of officer	100.00
Allen, Ralph Frederick, R. D. No. 1, Vandergrift. Killing button buck in close season	100.00
Blystone, Franklin Earl, Box 110, Edmon. Trapping without resident license	20.00
McIntyre, Guy Alvin, R. D. No. 2, Kams City. Hunting game on Sunday	25.00
Miloser, Lawrence, 517 4th Ave., Ford City. Hunting game, squirrels, between 5 P. M. & 7 A. M.	15.00
BEDFORD—\$195.00	
Creighton, Samuel Dean, Osterburg. Staking out traps for muskrats prior to opening hours	10.00
Ebersole, Ralph William, Osterburg. Setting traps for muskrats prior to the opening hour	10.00
Imler, Thomas Clymer, R. D. No. 1, Bedford. Possessing 15 muskrats in closed season	150.00
Stiver, Iver Calvin, R. D. No. 1, Imler. Hunting squirrel between 5 P. M. & 7 A. M.	15.00
Wright, Donald, R. D., Six Mile Run. Failure to tag big game within 1 hour after killing	10.00
BERKS—\$330.00	
Beacham, Edward, Box 432, R. D. No. 1, Temple. Attempting to kill deer with visible antlers in close season	100.00
Frey, Harold Lester, R. D. No. 1, Boyertown. Failure to tag trap ..	10.00
Heckrote, Harry Irvin, R. D. No. 2, Birdsboro. Possessing skins of furbearing animals in close season	30.00
Heckrote, Jr., John Russell, R. D. No. 2, Birdsboro. Possessing skins of furbearing animal in close season	20.00
Kintzer, John Herman, R. D. No. 1, Myerstown. Staking out or setting 3 traps for furbearers prior to the opening hour	30.00
Lindemuth, Ray Franklin, R. D. No. 3, 161, Hamburg. Attempting to take muskrat in close season; Failure to tag trap	20.00
Schnoke, Isaac Robert, Mt. Aetna. Possessing deer unlawfully taken	100.00
Strause, Walter Dariuse, 1433 Flush Valley Rd., Laureldale. Failure to tag trap	10.00
Wagner, Marvin Martin, R. D. No. 1, Hamburg. Failure to tag trap	10.00
BLAIR—\$220.00	
Henderson, Charles Thomas, Claysburg. Failure to tag two muskrat traps	20.00
McCauley, James C., 900 N. 3rd St., Bellwood. Failure to tag one trap	10.00
McCauley, Ray E., 900 N. 3rd St., Bellwood. Failure to tag one trap	10.00
Merritts, Dorsey Samuel, R. D. No. 1, Box 175, Hollidaysburg. Disturbing traps of 2 trappers	50.00
Musser, Joseph W., R. D. No. 3, Box 102, Altoona. Failure to tag two traps	20.00
Peterman, Andrew Emes, R. D. No. 1, 445 Altoona. Setting 5 muskrat traps in close season	50.00
Reighard, Floyd Martin, Martinsburg. Failure to tag 2 traps	20.00
Shannon, Melvin A., R. D. No. 1, Box 214, Altoona. Failure to tag 2 traps; Setting steel trap closer than five feet from hole	40.00
BRADFORD—\$100.00	
Vanderpool, Richard Daniel, Sr., R. D. No. 3, Wyalusing. Standing on watch in attempt to kill second deer	100.00
BUCKS—\$35.00	
Campillo, Joe., R. D. No. 1, Langhorne. Alien possessing shotgun and rifle	25.00
R. M. Taylor Fur Co., 218 New St., Quakertown. Buying the skin of fur-bearing animal unlawfully taken	10.00
CAMBRIA—\$500.00	
Baker, Earl Phillip, R. D. No. 1, Box 273, Patton. Possessing doe deer in close season	100.00
Bender, Francis, R. D., Windber. Failure to tag trap	10.00
Colosimo, William E., St. Michael. Possessing skin of muskrat unlawfully taken	10.00
Kline, Harold Joseph, R. D. No. 2, Ebensburg. Dogs chasing small game not under control of owner	10.00
Natrigo, Angelo J., 423 MacIntyre Ave., Patton. Possessing loaded rifle in vehicle in motion on highway	25.00
Ozio, James Frank, 536 Terra Cotta Ave., Patton. Possessing loaded rifle in vehicle in motion along highway	25.00
Powell, John A., 1109 Sunday St., Johnstown. Shooting on lands of public school	25.00
Strayer, Duard Bellmont, R. D. No. 1, Sidman. Possessing doe deer taken in close season	100.00
Thiec, Peter, Hastings. Shooting within 150 yards of occupied building	25.00
Van Scoyoc, Ben, 920 Bedford St., Johnstown. Shooting upon lands of park	25.00
Weinzierl, Andrew Michael, R. D. No. 1, Box 177, Portage. Falsifying dates in affidavit in claim for bounty	20.00
Weymer, Charles Philip, 729 Portage Rd., Cresson. Disturbing traps of another	25.00
Zupon, Milton Joseph, Fallen Timber. Participating in killing one deer in close season	100.00
CARBON—\$25.00	
Hill, Arnold C., Box 704, Weissport. Failure to tag fur-bearing animal removed from fur farm	25.00
CENTRE—\$165.00	
Auman, Lester Washington, Millheim. Dog chasing deer	25.00
Fravel, Glenn S., Howard. Trapping 1 day while trapping and hunting rights have been denied	40.00
Young, Floyd A., R. D. 1, Howard. Assisting to conceal game unlawfully killed	100.00
CHESTER—\$200.00	
Astheimer, Daniel A., R. D. No. 2, Downingtown. Failure to tag one trap	10.00
Bean, Paul B., Main St., Honeybrook. Failure to tag one trap	10.00
Casmay, George L., 115 Columbia Avenue, Phoenixville. Failure to tag one trap	10.00
Challingsworth, Harry Thomas, 333 Washington Ave., Phoenixville. Failure to tag two traps	10.00
Gogel, Charles S., R. D. No. 1, Phoenixville. Failure to tag one trap	10.00
Hillworth, Alfred Franklin, R. D. No. 1, Elverson. Taking mink in close season	10.00
Joy, Jr., Leslie Wells, R. D. No. 1, Chester Springs. Possessing a skin of furbearer more than ten days after the close season	10.00
Kowal, Michael, R. D. No. 2, Coatesville. Failure to tag one trap ..	10.00
Kowalski, Joe, 301 S. First St., Coatesville. Failure to tag two traps	20.00
Lafferty, Jr., Leon Roland, R. D. No. 1, Chester Springs. Possessing skin of furbearers more than ten days after close of season ..	10.00
Martin, Allen Lee, R. D. No. 2, Honeybrook. Failure to tag one trap	10.00
Obara, John Andrew, 1 High St., Phoenixville. Failure to tag three traps	30.00
Stoltzfus, Edward Aaron, R. D. No. 1, Parkesburg. Possessing skin of furbearing animal not lawfully killed	10.00
Trego, Sherman K., Exton. Failure to tag one trap	10.00
Trego, Walter Alexander, Exton. Failure to tag one trap	10.00
Weaver, Earl Ruben, R. D. No. 2, Honeybrook. Failure to tag one trap	10.00
Wiand, Raymond S., R. D. No. 1, Spring City. Failure to visit trap within 36 hours	10.00
CLARION—\$25.00	
Anthony, Earl Leroy, Box 155, 2nd St., East Brady. Hunting game on Sunday	25.00
CLEARFIELD—\$375.00	
Alexander, Pete J., Karthaus. Setting trap closer than 25 feet from beaver house	50.00
Anderson, Irvin B., R. D. No. 1, DuBois. Attempting to collect bounty on 3 weasels by giving false dates	30.00
Chaplin, Robert E., Coalport. Killing deer having less than 2 points to one antler	100.00
Fair, Oliver D., R. D., Rockton. Shooting within 150 yds. of occupied building	25.00
Fair, Ronald Glen, R. D. No. 1, Rockton. Attempting to kill deer in close season	100.00

Hill, Wilmer H., Cherry Tree. Possessing loaded rifle in vehicle in motion on highway	25.00
Martin, Richard Allen, R. D. Houtzdale. Attempting to take muskrat in close season	10.00
McMillin, Delbert R., 501 Ream St., DuBois. Setting steel trap closer than 5 feet from hole; Failure to tag trap	20 days
Peterson, Alfred L., R. D. Houtzdale. Attempting to take muskrat in close season	10.00
Young, Clayton V., R. D. 1, LaJose. Destroying tree on state game lands	25.00

COLUMBIA—\$90.00

Price, John C., R. D. No. 5, Bloomsburg. Failure to tag two traps ..	20.00
Price, Myron W., R. D. No. 5, Bloomsburg. Failure to tag two traps ..	20.00
Pursel, Elmer, Jr., R. D. 5, Bloomsburg. Disturbing traps of another ..	25.00
Steward, Gerald L., R. D. No. 5, Bloomsburg. Disturbing traps of another ..	25.00

CUMBERLAND—\$1,015.00

Bankes, Earl B., Perry & Grants Sts., Enola. Shooting within 150 yards of occupied building	25.00
Berheisel, Robert, R. D. No. 1, Carlisle. Hunting without resident license	20.00
Conrad, Grant T., R. D. No. 2, Carlisle. Possessing parts of deer unlawfully killed; Transporting deer unlawfully taken	200.00
Conrad, Albert B., R. D. No. 5, Carlisle. Possessing parts of deer unlawfully taken	100.00
Conrad, Mervin L., R. D. No. 5, Carlisle. Assisting to conceal game unlawfully killed; Possessing parts of deer unlawfully taken ..	200.00
Eckert, Chas. Edward, R. D. No. 4, Mechanicsburg. Shooting within 150 yards of occupied building	25.00
Gibney, John W., R. D. No. 1, Camp Hill. Failure to tag traps	10.00
Milos, Eli A., 206 2nd St., New Cumberland. Possessing skin of furbearing animal unlawfully taken	20.00
Myers, Floyd E., R. D. No. 1, Gardncrs. Entering state game refuge with firearm	25.00
Myers, Gerald Junior, R. D. No. 1, Gardners. Entering state game refuge with firearm	25.00
Payne, James Huston, 150 Reno St., New Cumberland. Possessing skin of furbearing animal unlawfully taken	10.00
Peck, Robert L., R. D. No. 1, Gardners. Entering state game refuge with firearm	25.00
Phillips, Lynwood B., R. D. No. 4, Carlisle. Possessing parts of deer unlawfully killed; Aiding in concealing deer unlawfully taken ..	200.00
Romito, John, R. D. No. 2, Gardners. Possessing deer taken in close season	100.00
Stonc, Charles A., Jr., R. D. No. 1, Camp Hill. Failure to tag traps ..	10.00

DAUPHIN—\$140.00

Bell, George, 143 N. Cassel St., Hummelstown. Disturbing traps of another	25.00
Blauch, Richard Henry, 1 N. Duke St., Hummelstown. Failure to tag trap	10.00
Cobaugh, Edwin, 143 N. Cassel St., Hummelstown. Disturbing traps of another	25.00
Hoke, Charles J., R. D. No. 1, Middletown. Failure to tag trap ..	10.00
Michaels, Gerald E., 1861 N. 12th St., Harrisburg. Disturbing traps of another	25.00
Riegle, Ellard L., R. D., Lykens. Setting one muskrat trap prior to opening hour	10.00
Seaman, John, R. D. 1, Grantville. Possessing unloaded rifle not securely wrapped in vehicle in motion along highway	25.00
Yeager, Ronald L., 109 Walnut St., Millersburg. Failure to tag trap ..	10.00

DELAWARE—\$105.00

Burns, Robert J., 119 2nd & Harding Rd., Broomall. Disturbing traps of another	25.00
DeMarco, Joseph Martic, 210 Bartram Ave., Essington. Attempting to kill game after closing hour	15.00
Goodman, Richard D., 83 Center Ave., Essington. Taking muskrat in close season	10.00
Hoag, Laurence E., 555 Jansen Ave., Shooting game after closing hour ..	15.00
Karlesses, John James, 59 Center Ave., Essington. Attempting to kill game after closing hour	15.00
Sample, George M., 14 Tribett Ave., Sharon Hill. Hunting game after closing hour	15.00
Tillman, Albert, Prospect Park. Taking muskrat in close season ..	10.00

ELK—\$135.00

Kilburn, Gene Wm., Elkland. Transporting untagged deer	25.00
Manno, Joseph W., 175 Terra Cotta Rd., Johnsonburg. Possessing 8 muskrats in close season	80.00
Northup, Eugene Francis, Larel Mill Rd., Ridgway. Possessing two muskrats in close season	20.00
Scolari, Pasqual, Agus Mines. Possessing loaded rifle in vehicle standing along highway	10.00

FAYETTE—\$560.00

Balaban, Stephen, R. D. No. 1, Dunbar. Resisting inspection; Assisting in the killing of deer in close season	200.00
Krupa, Frank J., Smithfield. Unlawfully removing furbearing animal from trap of another	25.00
Markotan, John R., 73 Brook St., Brownsville. Making false statement to secure hunting license	20.00
Metro, Jr., Andrew, Continental No. 2, R. D. No. 3, Uniontown. Taking muskrat in closed season	10.00
Metro, Regis M., Continental No. 2, R. D. No. 3, Uniontown. Taking muskrat in closed season	10.00
Newcomer, Millard J., R. D. No. 3, Connellsville, Box 377. Killing deer not having two points to one antler	100.00
Ralpach, Frederick Ernest, Box 53, Wick Haven. Failure to tag trap ..	10.00
Sheppard, Roman Malscih, Grindstone. Hunting, pursuing or disturbing wild birds in safety zone	25.00
Spak, Joseph B., Box 4, Leckrone. Taking sixteen muskrats in close season	160.00

FRANKLIN—\$80.00

Bricker, Jack E., R. D. No. 1, Mercersburg. Failure to tag trap	10.00
Lauthers, James R., 162 N. Carlisle St., Greencastle. Setting muskrat traps prior to opening hour	10.00
Leshner, Ira H., Marion. Killing cottontail rabbit in close season ..	10.00

McCoy, Winfield S., 17 Spruce St., Chambersburg. Staking out traps for muskrats prior to opening hour	10.00
Stine, Earl G., R. D. No. 3, Waynesboro. Failure to tag trap	10.00
Timmons, Martin H., R. D. No. 2, Mercersburg. Failure to tag traps ..	10.00
Varner, Clarence L., R. D. No. 2, Shippensburg. Failure to tag 2 muskrat traps	20.00

GREENE—\$185.00

Fox, Elmer Kinsey, Box 42, Davistown. Taking mink in closed season	10.00
Herrington, Charles R., R. D. 2, Waynesburg. Dog chasing deer	25.00
Lemley, Clark G., Mt. Morris. Taking 2 muskrats in close season ..	20.00
McCraken, James A., R. D. No. 1, Windridge. Taking muskrat in close season	10.00
Michantz, John, Box 410, Carmichaels. Taking 3 muskrats in close season	30.00
Taylor, Paul Cree, R. D. No. 6, Waynesburg. Trapping with an untagged trap	10.00
Ullom, John C., Waynesburg. Trapping with an untagged trap; Possessing seven muskrats in close season	80.00

HUNTINGDON—\$100.00

Rowe, Roger G., Mill Creek. Casting or throwing rays of light upon big game animal possessing firearm	100.00
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INDIANA—\$770.00

Anderson, Arthur W., Creekside. Failure to tag one trap	10.00
Barletta, Albert C., 318 Yellow Creek St., Homer City. Setting untagged trap	10.00
Black, Ralph M., Coral. Attempting to kill second deer in one season ..	100.00
Campbell, Clair Joseph, R. D. No. 1, Rochester Mills. Hunting without resident license	20.00
Frantz, Albert L., R. D. 1, Clymer. Hunting without resident license ..	20.00
Lucas, Louis W., 600 Railroad Ave., Homer City. Setting untagged trap	10.00
Miller, Elmer B., R. D. No. 1, Cherry Tree. Attempting to kill second deer in one season	100.00
Miller, Robert F., R. D. No. 1, Cherry Tree. Shooting at game on highway; Killing second deer in one season	125.00
Penrose, Robert M., R. D. No. 3, Shelocta. Taking mink in closed season	10.00
Pivdori, Arthur, Kent. Possessing 4 muskrat hides in closed season ..	40.00
Pluto, Alex B., Coral. Attempting to kill second deer in one season ..	100.00
Shields, Kenneth M., Box 38, Marchand. Killing male deer in close season	100.00
Shrauger, Roland A., R. D. No. 1, Home. Attempting to kill second deer in one season	100.00
Warden, William, R. D. No. 2, Cherry Tree. Camping on state game lands	25.00

JEFFERSON—\$50.00

Anthony, Lewis, Frostburg. Failure to maintain complete roster of camp	25.00
Taylor, Jas. Kenneth, R. D. No. 2, Brockway. Possessing unloaded rifle not securely wrapped in vehicle in motion on highway	25.00

JUNIATA—\$375.00

Armstrong, Herman W., Star Route Mifflintown. Disturbing the traps of another	25.00
Geedy, Nevin E., Perulack. Possessing parts of deer taken in close season	100.00
Gray, Harold G., Honey Grove. Attempting to kill second deer in one season	100.00
King, Nelson Brown, Jr., R. D. Mifflintown. Failure to tag traps properly	50.00
Peterson, Ernest S., R. D. Port Royal. Possessing parts of deer taken during the closed season	100.00

LACKAWANNA—\$50.00

Brink, Charles, R. D. No. 1, Gouldsboro. Hunting wild animal with shotgun containing more than 3 shells	10.00
Holtzman, Rudolph V., 430 Greenwood Ave., Clarks Summit. Taking 2 muskrats in closed season	20.00
White, Elwood W., R. D. No. 1, Olyphant. Setting 2 steel traps closer than 5 feet from hole	20.00

LANCASTER—\$510.00

Bachman, Richard L., East Petersburg. Failure to tag trap	10.00
Barto, Arthur J., East Petersburg. Failure to tag trap	10.00
Bowman, Paul H., R. D. No. 2, Honey Brook. Possessing skin of muskrat unlawfully killed	10.00
Good, Amos, R. D. No. 1, Narvon. Killing game between 5 P. M. & 7 A. M.	15.00
High, Elvin H., R. D. No. 3, Ephrata. Possessing one muskrat skin killed in closed season	10.00
Kauffman, John Martin, R. D. No. 2, Conestoga. Setting 6 traps for muskrat prior to open hour; Possessing 4 muskrats in closed season	100.00
McIntyre, Alan R., East Petersburg. Failure to tag trap	10.00
McWilliams, John A., 223 Church St., Lancaster. Failure to visit 3 steel traps within 36 hours	30.00
Martin, David Hoover, R. D. No. 2, New Holland. Possessing 1 muskrat skin taken in close season	10.00
Martin Jr., Isaac Hurst, R. D. No. 1, New Holland. Possessing one muskrat skin in closed season	10.00
Nolan, William H., 915 Clark St., Lancaster. Failure to tag trap ..	10.00
Reed, Edwin M., R. D. No. 1, Ephrata. Killing ringneck hen pheasant	25.00
Schnader, Carl, R. D. No. 1, Denver. Possessing skin of furbearing animal not lawfully killed	10.00
Stoltzfus, John Kauffman, R. D. No. 1, Ronks. Setting 13 traps for muskrat prior to opening hour	150.00
Wheary, Thomas J., Maytown. Purchasing raw furs for commercial purposes without resident permit	100.00

LEBANON—\$135.00

Bahm, George H., R. D. No. 1, Palmyra. Failure to tag trap	10.00
Caplinger, Conway W., R. D. No. 2, Lebanon. Staking out or setting 3 traps for furbearers, prior to opening hour	30.00
Furhman, George W., R. D. 3, Lebanon. Failure to tag trap	10.00

Henperly, Lawson A., R. D. No. 1, Annville. Failure to tag trap 10.00
 Mazur, Michael M., 2328 Mifflin St., West Lebanon. Disturbing trap set by officer of the Commission 25.00
 Meinsler Jr., Edward F., Jonestown. Hunting without license; killing grey squirrel in close season 30.00
 Sechrist, Dean E., Newmansstown. Failure to display license tag while trapping 20.00

LEHIGH—\$165.00

Heckman, Willard G., R. D. No. 1, Slatington. Taking muskrats in close season 20.00
 Hunsberger, Thomas D., 709 Lawrence St., Allentown. Setting traps for muskrats prior to opening hours 10.00
 Jones Jr., David, 633 W. Church St., Slatington. Disturbing traps of another 25.00
 Jones, Leon R., R. D. No. 2, Slatington. Disturbing traps of another Kravnick, Anthony, 4th & Grove St., Catasauqua. Disturbing traps of another 25.00
 Kunkle Jr., Paul Edwin, R. D. No. 1, Slatington. Taking muskrat in close season 20.00
 Lakatos, Dale A., R. D. No. 2, New Tripoli. Trapping muskrat in close season 10.00
 Lakatos, Robert A., R. D. 2, New Tripoli. Taking muskrats in close season 20.00
 Ritter, Jeol N., 709 Lawrence St., Allentown. Setting traps for muskrats prior to opening hour 10.00

LUZERNE—\$334.00

Aton, Clarence, R. D. No. 1, Mountain Top. Raising, selling or otherwise disposing of game without propagating permit 25.00
 Bryk, John M., 517 Penn Avenue, Dupont. Attempting to collect bounty on weasel by giving false date of killing 10.00
 Dokas, Edward T., 192 Lynwood Ave., Lynwood, Wilkes-Barre. Failure to report shooting accident causing injury to another ... 25.00
 Fahringer, Thomas L., 409 Mercer St., Nescopeck. Failing to tag traps 40.00
 Kelly, John H., 35 Meyers St., Forty Fort. Failure to tag one trap; Taking one muskrat in close season 20.00
 Knorr, Daniel E., 172 Jones St., Wilkes-Barre. Failure to tag trap Lapinski, Stanley F., 143 River St., Mocanaqua. Taking four muskrats in close season; Failure to tag 4 traps 10.00
 Lord, Basel L., 89 Parrish St., Dallas. Possessing loaded rifle in vehicle in motion on highway 80.00
 Melkosky, Leo J., 719 Winters Ave., Hazleton. Hunting within 150 yards of occupied building 25.00
 Paczkowski, Walter, 1211 Lincoln Ave., Nanticoke. Failure to properly tag trap 10.00
 Patterson, Lemoyne Y., 702 Donnley St., Duryea. Failure to report killing of deer within five days following close season 2.00
 Rossi, Anthony J., 14 Burke St., Wilkes-Barre. Failure to report killing of deer within five days following close of season 2.00
 Schultz, Raymond, 333 Maple St., Freeland. Attempting to collect bounty on weasel by giving false date of killing 10.00
 Shatrowsky, Frank J., 223 Sharpe St., Wyoming. Failure to report shooting accident causing injury to self 25.00
 Swartz, Joseph, 217 Packer St., Avoca. Removing parts of tree from state game lands 25 days
 Wudarski, Barney, 211 Wyoming Ave., Dupont. Obstructing emergency road on state game land closed to vehicular traffic 25.00

LYCOMING—\$55.00

Reigle, Sherman R., R. D. No. 3, Williamsport. Setting 3 traps for muskrats prior to opening hour 30.00
 Reinwald, James L., R. D. No. 1, Morris. Attempting to defraud the Commonwealth through the collection of bounty 25.00

McKEAN—\$10.00

Amell, Ronald G., Vine St., Port Allegheny. Failure to tag trap .. 10.00

MONROE—\$85.00

Christman, LeRoy, Pocono Pines. Selling two muskrat pelts unlawfully taken 20.00
 Counterman, Charles, 52 Borough St., E. Stroudsburg. Possessing deer unlawfully taken; Assisting in the killing of deer in close season 200 days
 Flaherty, William M., Tobyhanna. Depositing rubbish on state game lands 25.00
 James, Richard M., 30 4th St., Stroudsburg. Failure to visit trap within 36 hours; Failure to tag trap 20.00
 Winkelmann, Eugene O., 407 N. Courtland St., E. Stroudsburg. Failure to visit traps within 36 hours; failure to tag trap 20.00

MONTGOMERY—\$425.00

Allabach, Earl W., 421 Church St., Ambler. Setting traps not properly tagged 10.00
 Earhart, Brandt N., Blue Bell. Failure to display license tag while trapping; Possessing 6 muskrat skins in close season 80.00
 England, John Miller, Center Square. Trapping without resident license; Failure to tag traps 40.00
 Eshelman, Henry L., 116 West St., Souderton. Dog chasing and killing pheasant in close season 15.00
 Hamel, Robert, Church & Walnut Sts., Bridgeport. Failure to tag one trap 10.00
 Hodacz, Edward, R. D. No. 2, Schwenksville. Failure to tag trap .. 10.00
 Hoffman, Fred Miller, East Greenville. Trapping without resident license 20.00
 Kriebel, Frank Kelly, 105 Los Angeles Ave., Hollywood, Phila. Failure to tag nine traps; Failure to produce license on demand 110.00
 Mayberry, Samuel D., R. D. No. 2, Lansdale. Failure to tag traps and setting steel traps closer than 5 feet from holes 20.00
 Ricci, Leonard, Ridge Ave., Ambler. Trapping for furbearers in state dog training area; Possessing parts of muskrat in close season 35.00
 Seasholtz, Paul A., 629 Water St., Pottstown. Failure to tag trap .. 10.00
 Shoffner, Brooke W., R. D. No. 1, Conshohocken. Failure to tag traps Smith, Robert H., Grape St., R. D. Warminster, Hatboro. Killing pheasant 25.00
 Szafas, Wanda, 242 N. Price St., Pottstown. Dog chasing game unoccupied by owner 10.00
 Taglieber, Carl F., R. D. No. 1, Pennsburg. Failure to tag trap 10.00

MONTOUR—\$55.00

Cooper, Ralph E., R. D. No. 1, Danville. Dog chasing deer 25.00
 Gerst, Ronald F., 10 Second St., Danville. Possessing three muskrat hides in closed season 30.00

NORTHAMPTON—\$105.00

Ace, Donald W., Water & West Sts., Wind Gap. Setting traps for muskrat prior to opening hour 10.00
 Benvegno, John P., 2128 Forrest St., Easton. Trapping on State Game Area 25.00
 Boyko, Paul, R. D. No. 1, Bath. Attempting to collect bounty on 2 weasels by giving false date of killing 20.00
 Christian, Allen J., R. D. No. 1, Bethlehem. Hunting without resident license 20.00
 Erceg, Benjamin, 741 Kossuth St., Freemansburg. Failure to tag 2 traps 20.00
 Pizzuto, John, 256 S. New St., Nazareth. Failure to tag trap 10.00

NORTHUMBERLAND—\$10.00

Merrill, Luther D., 346 Linden St., Sunbury. Failure to tag trap .. 10.00

PERRY—\$20.00

Baughman, James W., Ickesburg. Failure to tag one trap 10.00
 Comp, Charles L., New Bloomfield. Staking out one trap for furbearers prior to opening hour 10.00

PHILADELPHIA—\$160.00

Capece, William M., 2200 Hemberger St., Phila. Attempting to take wild ducks in closed season 10.00
 Carter, William, 1921 George St., Phila. Failure to show license on demand 20.00
 Gaines, William E., 1921 W. Turner St., Phila. Failure to show hunters license on demand of officer 20.00
 Kerner, William R., 4208 Pechin St., Phila. 28. Possessing loaded rifle in vehicle while in motion 25.00
 Leone, Domenick T., 526 McKean St., Phila. Attempting to take ducks in close season 10.00
 Mitchell, George Rossie, 7428 Brewster Ave., Phila. Cutting den tree of raccoon 25.00
 Pickett, Rutherford, 7512 Botanic Ave., Phila. Cutting den tree of raccoon 25.00
 Scales, Nathaniel Ottis, 8318 Chelvert Ave., Phila. Cutting den tree of raccoon 25.00

POTTER—\$100.00

Perkins, William L., R. D. No. 1, Coudersport. Hunting for deer in close season 100.00

SCHUYLKILL—\$575.00

Gorenty, Earl L., Walnut St., Middleport. Possessing skln of furbearing animal unlawfully killed 10.00
 Kane, Francis J., 501 W. Race St., Pottsville. Staking out or setting trap for furbearer prior to the opening hour 10.00
 Kimmel, Leo J., R. D. No. 3, Pine Grove. Staking out or setting trap for furbearer prior to opening hour 10.00
 Miller, Norman R., R. D., Pine Grove. Assisting to conceal game unlawfully killed 100.00
 Reber, Harold Richard, R. D. No. 1, Auburn. Possessing 9 skins of furbearing animals unlawfully killed 90.00
 Schneck, Lester A., R. D. No. 1, Pine Grove. Digging live game out of place of refuge 10.00
 Stoyer, Walter H., R. D. No. 1, Auburn. Setting trap for furbearer prior to opening hour; Setting steel trap closer than 5 feet from hole; Disturbing five traps of another 145.00
 Wilhelm, Thomas C., Pine Grove. Transporting game unlawfully killed 100.00
 Zerbe, Elmer F., R. D., Pine Grove. Assisting to conceal deer unlawfully killed 100.00

SULLIVAN—\$20.00

Kravetz, Steve, Lopez. Failure to properly tag two traps 20.00

SOMERSET—\$245.00

Altemus, Roger, R. D. No. 2, Holsopple. Setting two traps for muskrats in closed season 20.00
 Bartolotti, Orazio, R. D. No. 1, Garrett. Failure to tag two traps Cramer, Richard F., 739 Oden St., Confluence. Disturbing traps of another 25.00
 Landis, Daniel C., 190 Plank Road, Somerset. Setting five traps for furbearers prior to opening hours 50.00
 Latuch, Anthony, R. D. No. 1, Rockwood. Failure to tag traps ... 20.00
 Mays, Edgar H., 501 Broadway St., Rockwood. Possessing skins of ten furbearing animals taken in close season 100.00
 Shoff, Robert M., R. D. No. 1, Friedens. Staking out traps for furbearer, prior to opening hour 10.00

SUSQUEHANNA—\$105.00

Coon, Richard D., R. D. No. 3, Susquehanna. Attempting to collect bounty on fox by giving false date of killing 10.00
 Goodwin, Lowell M., R. D. No. 1, Rushville. Possessing skins of two furbearing animals unlawfully taken 20.00
 Rose, Harold S., R. D. No. 2, New Milford. Failure to visit trap within 36 hours; Failure to tag trap; Attempting to collect bounty on weasel 30.00
 Shuman, Herman R., R. D. No. 2, Susquehanna. Failure to tag trap; Failure to visit traps within 36 hours 20.00
 Tompkins, Grant S., Kingsley. Hunter killing livestock 25.00

WAYNE—\$10.00

Shemanski, Jennie L., R. D. No. 2, Waymart. Attempting to collect bounty on weasel by giving false date on killing 10.00

WASHINGTON—\$470.00

Cooper, Samuel F., R. D. No. 1, Dunns Station. Hunting deer after killing limit 100.00
 Willia, William P., Dunns Station. Hunting deer after killing limit 100.00
 Gault, Jr., McDonald, Rea. Failure to tag one trap 10.00
 Hemelrick, William H., R. D. No. 1, Dunns Station. Hunting deer after having killed season's limit 100.00
 Six, Theodore M., R. D. No. 1, Washington. Hunting deer after killing season's limit 100.00

Tairiol, Joseph, R. D. No. 3, Burgettstown. Depositing rubbish on state game lands	25.00
Timan, William, 30 Locust St., Muse. Shooting within 150 yds. of occupied building	25.00
Trax, Al T., Finleyville, R. D. No. 1. Possessing skin of furbearing animal unlawfully taken	10.00

WYOMING—\$20.00

Harvey, Norman W., R. D. No. 1, Tunkhannock. Failure to properly tag one trap	10.00
Possessing loaded shotgun in vehicle standing along highway ..	10.00

WESTMORELAND—\$405.00

Bally, Leonard J., Box 312, Mt. Pleasant. Taking one muskrat in close season	10.00
Baughman, Clarence Thomas, Pleasant Unity. Making false statement to secure hunting license	20.00
Bouch, James H., Seward. Hunting within 150 yds. of occupied building	25.00
Bouch, Robert Junior, Seward. Hunting within 150 yds. of occupied building	25.00
Bryga, Robert U., R. D. No. 1, Mt. Pleasant. Attempting to take muskrat in close season	10.00
Burd, Donald, R. D. No. 1, West Newton. Shooting across highway while hunting game	25.00
Finan, Donald L., R. D. No. 3, Box 212, Greensburg. Taking muskrat in closed season	10.00
Graham, Rodney D., R. D. No. 1, Latrobe. Possessing loaded shotgun in vehicle in motion along highway	25.00
Klssinger, William C., R. D. No. 1, West Newton. Disturbing traps of another	25.00
Kline, Howard S., Box 203, Manor. Aiding in securing hunting license for person not entitled to same	20.00
Pavuk, Jr., Andrew, 172 Standard Shaft, Mt. Pleasant. Attempting to take muskrat in close season	10.00
Pudllsh, Paul Peter, R. D. No. 3, Latrobe. Failure to tag one trap	10.00
Sansone, John P., R. D. No. 1, Box 57, Mt. Pleasant. Attempting to collect bounty on two weasels by giving false date of killing ..	20.00

Selemon, George, R. D. No. 1, Mt. Pleasant. Employee failing to tag furbearing animals removed from fur farm	25.00
Shuster, Leon W., R. D. No. 2, Leechburg. Using an automobile to hunt for, or wound wild bird or animal	50.00
Sias, Glenn A., R. D. No. 1, Greensburg. Failure to tag trap	10.00
Tamewitz, Robert J., Box 195, Westmoreland City. Attempting to take muskrats in close season	10.00
Trout, Samuel E., United. Employee failing to tag furbearing animals removed from fur farm	25.00
Wineland, Daniel Richard, R. D. No. 1, Greensburg. Failing to tag trap	10.00
Yowns, Joseph, R. D. No. 1, Murrysville. Possessing 4 muskrat pelts taken in closed season	40.00

YORK—\$95.00

Blevins, Willard J., 57 E. High St., Red Lion. Staking out trap for furbearers prior to opening hour	10.00
Miller, Ronald G., R. D. No. 1, Dallastown. Possessing muskrat pelt taken in close season	20.00
Sipe, Walter, 948 Wood St., York. Shooting within 150 yds. of occupied building	25.00
Storm, James W., R. D. No. 2, Hanover. Taking muskrat in closed season	10.00
Whorley, Emory G., Blair. Trapping without resident license; Failure to tag trap	30.00

NON-RESIDENTS—\$660.00

Anagnabogok, Roland, Whales, Alaska. Hunting one day without non-resident license	50.00
Fischer, Richard Eugene, 228 Wolf's Land, Pelham, N. Y. Possessing antlerless deer unlawfully taken	100.00
Heisner, Reuben H., 942 W. 29th St., Lorain. Possessing loaded rifle in vehicle standing along highway	10.00
Perretti, Joseph Jr., 1720 W. 3rd St., Brooklyn, N. Y. Hunting without non-resident license; Assisting to transport game unlawfully taken; Possessing deer unlawfully taken	250.00
Zaidan, Elias, 417 15th St., Brooklyn, N. Y. Hunting without non-resident license; Possessing deer unlawfully killed; Transporting game unlawfully taken	250.00

GAME LAW VIOLATIONS

(All persons listed by county of residence, regardless of county in which violations occurred)

Cases Settled During the Month of December, 1949

ALLEGHENY—\$1,270.00

Bencho, John, 329 Campbell St., McKees Rocks. Shooting at game ducks after closing hour	\$ 20.00
Bubacz, Walter J., 2555 Ivyglenn St., Pittsburgh. Possessing loaded shotgun in vehicle in motion	25.00
Brown, Ward A., 842 Penna. Ave., Coraopolis, Pa. Possessing illegal killed deer	100.00
Campbell, James, 500 McCoy Rd., McKees Rocks. Possessing illegal killed deer	100.00
Harsmanko, Adam, 233 St. Clair Ave., Clairton. Possessing spike buck	100.00
Havern, Harry R., R. D. No. 1, DuBold Rd., McKees Rock. Shooting at antlerless deer	100.00
Hudach, Rudolph J., 1267 Hodgkiss St., N. S., Pgh., Pa. Hunting within 150 yds. of occupied building	25.00
Stefanko, Albert, Greenville, Pa. Shooting at doe in close season ..	100.00
Shodde, William, 2415 East St., Pittsburgh, Pa. Assisting to conceal deer unlawfully killed; Possessing parts of illegal deer	200.00
Shook, George H., 74 Elm St., Glenshaw, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Emrick, Raymond A., 2414 Mount Troy, Pgh., Pa. Shooting at target in big game season	10.00
Grogan, Jr., James C., 1428 Hodgkiss St., N. S., Pgh., Pa. Hunting within 150 yds. of occupied building	25.00
King, George W., 510 Stokes Ave., N. Braddock. Shooting at wild geese one hour before sunset	15.00
Davis, John H., 6430 Winslow St., Pgh. 6, Pa. Entering State Game Refuge in open season	25.00
Lovejoy, Samuel E., 500 Mills Ave., Braddock, Pa. Shooting at wild geese one hour before sunset	15.00
Forsythe, Wayne C., 868 Fourth Ave., Coraopolis. Possessing deer unlawfully taken	100.00
Wilhoit, Jr., Millard K., 853 Kennedy St., Carnegie, Pa. Killing doe deer in close season; Killing 2nd deer in close season; Killing antlerless deer on Dec. 10th after killing deer on Dec. 3rd	300.00

BEAVER—\$100.00

Ayers, James A., 1010 24th St., Beaver Falls, Pa. Transporting illegally killed deer	100.00
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BUTLER—\$375.00

Stepp, Robert L., 318 Liberty St., Butler, Pa. Hunting within 150 yds. of occupied building	25.00
Snow, Elmer, Bruin, Pa. Possessing parts of deer unlawfully taken ..	100.00
Redman, James W., Railroad St., Zellenople, Pa. Taking 5 muskrats in close season	50.00
Tiberi, Bernard A., 410 Locust St., Butler, Pa. Possessing deer unlawfully killed	100.00
Vorous, John S., R. D. No. 1, Hilliards, Pa. Attempting to kill second deer in one season	100.00

CLARION—\$2,755.00

Clutter, William, Curtsville, Pa. Hunting while hunting rights were denied	40.00
Dawes, Fred A., R. D. No. 1, Kennerdell, Pa. Attempting to kill deer in close season	100.00
Edwards, Robert D., R. D. No. 3, Emlenton, Pa. Possessing deer unlawfully taken	100.00
Schill, Charles H., Lucinda, Pa. Hunting while rights have been denied	40.00

Summerville, Wilson E., R. D. No. 1, Sligo, Pa. Possessing one green muskrat pelt in close season	10.00
Shoup, Samuel J., St. Petersburg, Pa. Possessing parts of deer unlawfully taken	96.00
Hepfl, George, Woodlawn, Clarion, Pa. Hunting without resident license	20.00
Miles, John M., R. D. No. 2, Summerville, Pa. Possessing an illegal deer	100.00
Martz, William D., R. D. No. 1, Brookville, Pa. Attempting to kill deer in close season	100.00
Amsler, James F., R. D. No. 1, Knox, Pa. Killing 2nd deer in one season; Transporting an untagged deer	125.00
Blair, Wilbur R., R. D. No. 1, New Bethlehem, Pa. Assisting to conceal deer unlawfully taken; Possessing parts of illegally killed deer	200.00
Blair, Henry P., R. D. No. 1, New Bethlehem, Pa. Assisting to conceal deer unlawfully killed; Possessing parts of illegally killed deer	200.00
Blair, Fred H., R. D. No. 1, New Bethlehem, Pa. Assisting to conceal deer unlawfully killed; Possessing parts of illegally killed deer	200.00
Blair, Arthur, R. D. No. 1, New Bethlehem, Pa. Assisting to conceal deer unlawfully killed; Possessing parts of illegally killed deer	200.00
Dawes, Fred A., R. D. No. 1, Kennerdell, Pa. Attempting to kill deer by use of artificial light	100.00
Dowing, David H., East Brady, Pa. Possessing deer unlawfully taken	100.00
Whitling, Richard E., R. D. No. 3, Emlenton, Pa. Assisting to kill and conceal 2 deer unlawfully	192.00
Whitling, William H., R. D. No. 3, Emlenton, Pa. Possessing parts of deer unlawfully taken	100.00
Wolf, James E., R. D. No. 3, Emlenton, Pa. Possessing parts of 2 deer unlawfully taken	197.00
Whitling, Albert L., R. D. No. 3, Emlenton, Pa. Assisting to conceal deer unlawfully killed	97.00
Whitling, Ralph L., R. D. No. 3, Emlenton, Pa. Assisting to kill and conceal 2 deer unlawfully	192.00
Henry, Joseph L., R. D. No. 2, Rimersburg, Pa. Transporting parts of big game unmarked	25.00
Hepfl, George J., R. D. No. 2, Clarion, Pa. Possessing parts of illegal killed deer	100.00
Klingler, Stanley E., R. D. No. 1, Knox, Pa. Failure to produce roster of party hunting big game	25.00
Whitmer, Donald J., R. D. No. 3, Emlenton, Pa. Possessing parts of deer unlawfully taken	96.00

CLEARFIELD—\$25.00

Miller, Edward J., 311 Paurner St., Osceola Mills. Transporting untagged parts of deer	25.00
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CRAWFORD—\$1,325.00

Marian, Charles R., R. D. No. 2, Conneaut Lake, Pa. Possessing loaded rifle in vehicle in motion on highway; Possessing parts of male deer taken in close season; Hunting without resident license; Using vehicle with lights attached for killing raccoon ..	195.00
Morian, Edward A., R. D. No. 1, Atlantic, Pa. Transporting buck deer killed in close season	100.00
DeCroodt, Kenneth L., R. D. No. 7, Meadville, Pa. Failure to submit annual report	25.00

Arnold, Lester B., R. D. No. 1, Espyville, Pa. Assisting to transport illegal deer	100.00
Bradshaw, George E., R. D. No. 2, Meadville, Pa. Killing doe deer in close season	100.00
Beers, Ralph M., R. D. No. 2, Titusville, Pa. Killing deer on Sunday; Possessing parts of illegal deer	125.00
Beers, Marion W., R. D. No. 1, Centerville, Pa. Possessing parts of illegal deer	100.00
Bennett, James A., R. D. No. 1, Espyville, Pa. Killing an antlerless deer in close season	100.00
Campion, Dale, Linesville, Pa. Taking muskrat in close season	10.00
Culver, Ralph R., R. D. No. 1, Hartstown, Pa. Killing doe in close season	100.00
Burnette, Clair L., R. D. No. 3, Cochran, Pa. Transporting big game deer unmarked	25.00
Herman, Lewis E., R. D. No. 1, Hartstown, Pa. Killing doe deer in close season	100.00
Heffner, Walter L., Box 153, Conneaut Lake, Pa. Possessing 2 quail taken in close season	50.00
Palmiero, Henry F., 133 Wadsworth St., Meadville. Hunting small game in safety zone	25.00
Wright, Norman L., R. D. No. 1, Townville, Pa. Killing doe deer in close season	100.00
Weigle, Harold W., Box 317, Conneaut Lake, Pa. Possessing 2 quail taken in close season	50.00
Gibson, Lee J., R. D. No. 1, Townville, Pa. Failure to produce hunting license upon demand of land owner	20.00

ERIE—\$855.00

Bedo, Elro E., 1127 Arlington Rd., Erie, Pa. Possessing loaded rifle in vehicle in motion	25.00
Duda, Joseph, R. D. No. 2, Albion, Pa. Disturbing traps of another	25.00
Gregory, Edmund J., Jr., R. D. No. 1, Harbor Creek, Pa. Loaded rifle in vehicle standing on highway	10.00
Haskins, Carol W., Cherry St., Waterford, Pa. Failure to tag big game (deer) within one hour	10.00
Kubicki Jr., Joseph J., 5225 Peach St., Erie, Pa. Possessing loaded shotgun in vehicle standing on highway	25.00
Repelewski, Joseph St., 546 E. 22 St., Erie, Pa. Hunting without resident license	20.00
Wilkinson, Nelson A., R. D. No. 1, North East, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Wilkinson, Donald C., 82 Gibson St., North East, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
White, Robert W., 131½ Wells Ave., Albion, Pa. Possessing parts of big game unlawfully killed	100.00
White, Carl C., Franklin St., Albion, Pa. Transporting parts of big game unlawfully killed	100.00
Peters, Paul W., R. D. No. 4, Union City, Pa. Possessing 4 muskrats in close season; Failure to tag trap	50.00
Patterson, Clair K., 255 East 8th St., Erie, Pa. Failure to tag deer within one hour after killing	10.00
Pascal, Peter F., 3116 Berkley Ave., Erie, Pa. Assisting in killing more deer than camp limit	100.00
Noonan, Ralph J., 627 Tacoma Rd., Erie, Pa. Transporting parts of deer unmarked	25.00
Feldman, Raymond C., 1304 West 25th St., Erie, Pa. Hunting waterfowl after closing time	15.00
Kranz, Conrad E., 144 East 29th St., Erie, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
McCarthy, Noll J., 438 East 9th St., Erie, Pa. Possessing loaded rifle in vehicle standing on highway	25.00
Nozlgila, Jr., Edward, 2321 Holland St., Erie, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Sutto, Stephen, R. D. No. 5, Old French Rd., Erie. Shooting within 150 yds. of occupied building	25.00
Sipes, Douglas D., R. D. No. 2, Waterford, Pa. Cutting one pine tree on State Game Land	25.00
Venesky, Herman J., 1258 Buffalo Rd., Erie, Pa. Killing one deer in close season	100.00
Testi, Thomas, R. D. No. 6, Erie, Pa. Killing doe deer in close season	100.00
Lynch, John R., 825 Chestnut St., Erie, Pa. Destroying one pine tree on Dog Training Area	25.00

FAYETTE—\$100.00

Markotan, John, 76 Brook St., Brownsville, Pa. Possessing spike buck in close season	100.00
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INDIANA—\$25.00

Martin, James J., 106 W. Main St., Greenfield, Indiana, Pa. Transporting untagged deer	25.00
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LAWRENCE—\$205.00

Dawson, Clarence R., R. D. No. 1, New Wilmington, Pa. Possessing loaded rifle in vehicle in motion	25.00
Dexter, Kenneth W., R. D. No. 1, Edinburg, Pa. Taking muskrats in close season	30.00
Tinker, Richard L., P. O. Box 215, Ellwood City, Pa. Improperly tagged traps (2)	20.00
Terpilowski, Charles W., R. D. No. 9, New Castle, Pa. Attempting to kill second deer in one season	100.00
Kelly, James K., R. D. No. 1, Edinburg, Pa. Failure to tag traps	30.00

LYCOMING—\$25.00

Engeman, Leonard, 315 N. Hanna St., Lock Haven, Pa. Transporting parts of deer without marker attached	25.00
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McKEAN—\$25.00

Zeeder, George, Box 5, Ludlow, Pa. Transporting untagged deer	25.00
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MERCER—\$810.00

Reynolds, Jack L., R. D. No. 8, Shenango Rd., New Castle. Transporting untagged deer	25.00
Weaver, Harry T., R. D. No. 1, Jackson Center, Pa. Failure to maintain roster of party hunting big game	25.00
Pritchard, Donald D., R. D. No. 1, Sharpsville, Pa. Assisting to conceal deer unlawfully killed	100.00
Biros, Joe, R. D. No. 2, Sharon, Pa. Setting out three traps for muskrats before open season	30.00
Bethune, Paul P., Apt. 6B, Reynoldsvillage, Transfer, Pa. Possessing male deer with antlers in close season	100.00

Baker, Harold N., 13 W. Ohio St., Sharon, Pa. Non-resident hunting on resident license	50.00
Cox, Pearson W., R. D. No. 2, New Wilmington, Pa. Possessing loaded rifle in vehicle in motion on highway	25.00
Conover, Donald H., 192 Clarksville St., Greenville. Hunting without resident license	20.00
Fabian, Steve, R. D. No. 4, Mercer, Pa. Failure to produce head of deer upon demand of officer	100.00
Foltz, Robert J., Apt. A16F, Camp Reynolds, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Filer, Robert H., 590 E. Market St., Mercer, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Green, Charles E., R. D. No. 3, Greenville, Pa. Hunting within 150 yards of occupied building	25.00
Ross, Paul E., 127 Mehard Ave., Greenville. Failure to stop upon signal of Game Protector	10.00
Montgomery, Kenneth L., 395 Rull St., Greenville, Pa. Possessing loaded rifle in vehicle standing along highway	10.00
Macko, Joseph G., 8 Garfield St., Greenville, Pa. Transporting parts of game (big) unmarked	25.00
Sensesak, John, R. D. No. 5, Greenville, Pa. Standing on watch to kill second deer	100.00
Sherman, Albert H., 28 Main St., Sharpsville, Pa. Failure to maintain roster of party hunting big game	25.00
Somerset, Fred, 505 Spearman Ave., Farrell, Pa. Possessing loaded gun in vehicle standing on highway	10.00
Hayes, James, 936 Wallace Ave., Farrell, Pa. Shooting at target in big game season	10.00
Dawes, Dale I., R. D. No. 1, Transfer, Pa. Possessing antlerless deer unlawfully taken	100.00

WARREN—\$735.00

Anderson, George D., Route No. 1, Russell, Pa. Killing second deer and transporting untagged deer; Possessing spike buck unlawfully taken	225.00
Smith, Lavelle, 113 Eddy St., Warren, Pa. Hunting on borrowed license	20.00
Studd, Arthur L., Spring Creek, Pa. Making false statement to secure hunting license	25.00
Schuler, Lavern O., 20 Hemlock St., Warren, Pa. Assisting in concealment of an unlawfully taken deer	100.00
Roberts, Carl A., Bear Lake, Pa. Hunting without resident license	20.00
Malmberg, Elmer V., Klnzua, Pa. Setting one trap for muskrat prior to open season	10.00
Mauk, Gale W., 113 Eddy St., Warren, Pa. Lending hunting license to another	20.00
Williams, Herbert R., 203 Division St., Warren, Pa. Selling one deer protected by laws of the Commonwealth; Guide delivering deer to employer	200.00
Williams, Herbert R., 203 Division St., Warren, Pa. Transporting deer unlawfully taken; Possessing deer unlawfully taken	200.00
Nyquist, Harold S., 315 W. Main St., Youngsville. Failure to display license tag while hunting	20.00

WASHINGTON—\$25.00

Cratty, Jack A., Liberty Ave., W. Brownsville. Possessing loaded rifle in vehicle in motion on highway	25.00
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WESTMORELAND—\$415.00

Golla, John F., R. D. No. 2, Volant, Pa. Killing a protected bird—(black bird)	15.00
Lynch, Laverne A., R. D. No. 1, New Stanton, Pa. Possessing illegally killed deer	100.00
Walton, Roy A., R. D. No. 1, New Stanton, Pa. Assisting to conceal illegally killed deer	100.00
Smith, Morris, R. D. No. 1, New Stanton, Pa. Assisting to conceal illegally killed deer	100.00
Steshoski, Edward, R. D. No. 1, Mt. Pleasant, Pa. Assisting to conceal illegally killed deer	100.00

WASHINGTON—\$30.00

Harden, Joseph B., Arlington Ave., Woldale, Pa. Possessing loaded rifle in car	10.00
Woodburn, William A., Avela, Pa. Hunting without resident license	20.00

VENANGO—\$190.00

Coshnitzke, Harry J., Oil City, Pa. Transporting deer without marker attached	25.00
Morrow, Charles D., R. D. No. 1, Emlenton, Pa. Shooting at squirrel during close season	10.00
Stanley, Carroll Lee, R. D. No. 1, Harrisville, Pa. Shooting at target during big game season	10.00
Stover, Baynard F., Star Route, Titusville, Pa. Possessing loaded rifle in vehicle standing on highway	10.00
Hughes, Richard D., R. D. No. 1, Emlenton, Pa. Killing 2 squirrels in close season	20.00
Hilliard, Claud P., R. D. No. 2, Emlenton, Pa. Possessing deer unlawfully taken	100.00
Berlin, Jr., William G., R. D. No. 2, Emlenton, Pa. Transporting deer not properly tagged	25.00

NON-RESIDENT—\$4,730.00

Brothers, Robert W., Norwalk, Ohio. Possessing antlerless deer unlawfully taken	100.00
Brooks, Smith W., Youngstown, Ohio. Transporting parts of deer unmarked	25.00
Carroll, Raymond W., Youngstown, Ohio. Transporting parts of deer unmarked	25.00
Devassie, Jon R., Hubbard, Ohio. Transporting improperly tagged deer	25.00
Giering, Vincent S., Youngstown, Ohio. Killing second deer in one season	100.00
Smith, Frank A., Cuyahoga Falls, Ohio. Transporting untagged deer	25.00
Merzek, Joseph, Euclid, Ohio. Making false statement to secure hunting license	20.00
Warner, Elmore G., Canton, Ohio. Possessing antlerless deer unlawfully taken	100.00
Taylor, James L., Cleveland, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Jones, Waverly L., Cleveland, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00
Oline, Hal T., Valley City, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00

Gray, Thurlow F., Akron, Ohio. Transporting an untagged deer	25.00	Bahniuk, Mike, Cleveland, Ohio. Attempting to kill second deer ..	100.00
Patch, George E., Plain City, Ohio. Non-resident hunting without license	50.00	Bender, George M., Independence, Ohio. Attempting to kill second deer	100.00
Parker, William M., Cleveland, Ohio. Transporting big game deer unmarked	25.00	Cup, George John, Cleveland, Ohio. Hunting without nonresident license	50.00
Porfilio, David L., Youngstown, Ohio. Hunting without non-resident license	50.00	Bender, George M., Independence, Ohio. Possessing one unlawfully killed deer	100.00
Pasternack, Carl, Struthers, Ohio. Hunting without non-resident license	50.00	Balcar, Walter, Martins Ferry, Ohio. Possessing antlerless deer unlawfully taken	100.00
Priest, Lester E., Johnstown, Ohio. Transporting improperly tagged deer	25.00	Dicken, Wayne, Roseville, Ohio. Possessing deer unlawfully taken	100.00
Stepsis, Stanley, Cleveland, Ohio. Possessing loaded rifle in vehicle in motion	25.00	Davies, Enoch D., Cleveland, Ohio. Possessing spike buck taken in close season	100.00
Scheibert, Donald E., Trenton, Ohio. Possessing spike buck	100.00	Donovan, Nelson A., Parma, Ohio. Hunting without nonresident license	50.00
Sherosky, Andrew J., Leavittsburg, Ohio. Transporting parts of big game deer unmarked	25.00	Deitrick, Wilfred G., Findlay, Ohio. Possessing loaded rifle in vehicle standing on highway	10.00
Schoonover, Charles F., Elkins, W. Va. Hunting without non-resident license	50.00	Sotor, Kobbe, Lindale, Ohio. Attempting to kill second deer in one season	100.00
Sotor, Kobbe, Lindale, Ohio. Failure to tag deer properly	25.00	Seiler, Emerson D., Fayette, Ohio. Failure to tag deer within one hour after killing	10.00
La Patch, James C., Cuyahoga Falls, Ohio. Possessing male deer in close season	100.00	Wisneski, Joseph, Independence, Ohio. Concealing illegally killed deer	100.00
Ames, Vern E., Bryan, Ohio. Killing male deer not having two points to one antler	100.00	Makidon, Ernest C., Akron Ohio. Assisting to conceal illegally killed deer	100.00
Noble, Sam A., Xenia, Ohio. Possessing spike buck taken in close season	100.00	Mocarski, Anthony B., Cleveland, Ohio. Transporting loaded rifle in vehicle on highway	25.00
Cochran, Curby F., LaRue, Ohio. Transporting loaded rifle in vehicle	25.00	Martine, Gerald C., Richwood, Ohio. Possessing deer unlawfully taken	100.00
Callahan, William T., Jr., Cleveland, Ohio. Possessing deer taken in close season	100.00	Meyer, Oliver O., Bluffton, Indiana. Hunting without non-resident license	50.00
Yoxthelmer, Harry E., Bedford, Ohio. Possessing loaded rifle in vehicle standing on highway	10.00	Lindahl, Robert H., Cleveland, Ohio. Transporting spike buck taken in close season	100.00
Yonkof, Stephen A., Olmstead Falls, Ohio. Killing antlerless deer in close season	100.00	Reeley, Ray D., Richwood, Ohio. Possessing deer unlawfully taken	100.00
Graber, Glenn J., Hartsville, Ohio. Shooting within 150 yds. of occupied building	25.00	Keyser, Elmer C., Scott, Ohio. Possessing buck deer in close season	100.00
Goodenow, Arthur G., Conneaut, Ohio. Making false statement to secure hunting license	20.00	Papish, Frank Richard, Pueblo, Colorado. Killing 2nd deer in one season	100.00
Haberek, Albert C., Cleveland, Ohio. Possessing loaded rifle in vehicle in motion	25.00	Cessna, Clayton R., Canton, Ohio. Nonresident hunting without license	50.00
Helfer, Harold D., Andover, Ohio. Assisting to transport illegal deer	100.00	Cessna, Clayton R., Canton, Ohio. Possessing loaded rifle in vehicle in motion	25.00
Hershberger, Roman D., Sugar Creek, Ohio. Hunting without non-resident license	50.00	Cook, Charles E., Johnstown, Ohio. Transporting improperly tagged deer	25.00
Romels, Paul J., Willington, Ohio. Killing second deer	100.00	Cremans, Roy, Groveport, Ohio. Transporting improperly tagged deer	25.00
Rolf, Wilbert A., Lakeside, Ohio. Buying a male deer in Penna.	100.00	Cirino, Nunzio J., Cleveland, Ohio. Possessing doe deer taken in close season	100.00
Rosencrans, Charles A., Unionville, Ohio. Transporting parts of deer unmarked	25.00	Baer, Henry C., Toledo, Ohio. Possessing deer killed in close season	100.00
Wiley, William E., Dayton, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00	Burkett, Clarence E., South Bend, Indiana. Possession of an illegal deer	100.00
O'Reilly, Thomas C., Lakewood 7, Ohio. Possessing loaded rifle in vehicle in motion on highway	25.00	Brugger, Owen V., Clyde, Ohio. Possessing doe killed in close season	100.00
Rennillo, Michael A., Cleveland, Ohio. Aiding in transporting illegally killed deer	100.00	Baumbgardner, Louis V., Huntingdon, W. Va. Possessing an illegal deer	100.00
Oltean, John Jr., Windam, Ohio. Possessing male deer taken in close season	100.00	Ferguson, Everett D., Dayton, Ohio. Possessing loaded rifle in vehicle in motion	25.00
Oleiki, Wallace St., Cleveland, Ohio. Killing spike buck in close season	100.00	Bowman, Laurene F., Toledo, Ohio. Possessing female deer killed in close season	100.00
Allen, Cecil C., Akron, Ohio. Killing deer with antlers in close season	100.00		

A BACKING LESSON—from Page 22

let the pup go toward the pointing dog; stop him at the desired distance, and creep up to him using a soft yet firm command to "whoa." If he does not hold himself erect, gently lift his head, and tail until he holds a position of a lofty pointing dog. Exercise extreme patience and avoid excitement. Easy firmness quiets a dog and encourages obedience. Excitement and loud shouts only lead to confusion. Far too many dogs have been ruined through impatient training and lack of understanding.

Physical punishment should be avoided in training the young dog as it only makes him shy and afraid. An older dog when his training is finished can be punished for a wrong because he is old enough to know that he has deliberately erred.

Extreme care should be exercised when using an experienced dog to help train the young fellow because the pupil may become too dependent on his brace mate to cover the territory and hunt for game. If he should show signs of losing his initiative, take him out alone for awhile.

A great help in training a gun dog is the book, "How to Train Your Bird Dog" by Horace Lytle and published by the A. F. Hochwalt Company, Dayton, Ohio. It is well written by a man who knows, loves, and understands all hunting dogs. Training problems can be greatly simplified by careful study and frequent reference to this book.

SAFEGUARDING YOUR INTERESTS—from Page 12

The interest manifested in it was astounding and it was a real credit to the combined efforts of both the Commission and the Federation. In line with your request, you will be co-sponsors of the exhibit at Philadelphia, beginning March 3.

Ahead of Schedule

Our work is proceeding entirely satisfactorily, and it should be gratifying to know that we are making real progress with every project and every program. Nothing is being overlooked, slighted or neglected and we are making wonderful speed with our food and cover program all over Pennsylvania. We are ahead of schedule and now setting a pace for all others to follow—but as I said last October, "It's only the beginning." An official of the Wildlife Management Institute who recently made a tour of Pennsylvania to acquaint himself with our work remarked that "It was amazing

to see the magnitude of your field program and the solidly basic approach to the problem of wildlife restoration." We are really going forward and wasting neither time, effort nor money.

The Sportsmen's Interests Safeguarded

I could talk to you about the many fine and heartening things being accomplished but you have important business to transact and difficult decisions of your own to make. Our news releases which now go out in the form of a Weekly Newsletter, and the GAME NEWS should keep you in close touch with our efforts and results. Your interests are being selfishly guarded and furthered.

It has been my objective in life to do a good job fearlessly and honestly with neither favor nor partiality toward anyone. Our efforts in behalf of wildlife management will always be directed with a desire to merit both faith and confidence.

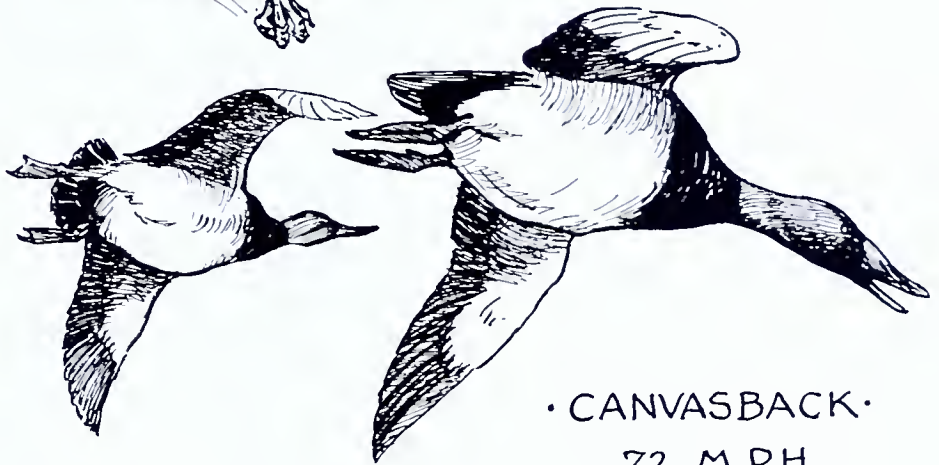
HOW FAST DO THEY FLY ?



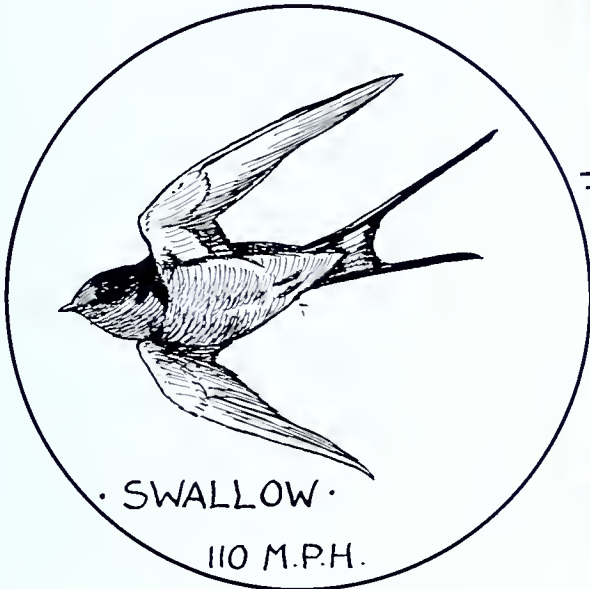
• DUCK HAWK •
180 M.P.H.
IN "STOOP"



• ROBIN •
36 M.P.H.



• CANVASBACK •
72 M.P.H.



• SWALLOW •
110 M.P.H.



JACOB
BATES
ABBOTT
1949

• JACK RABBIT •
45 M.P.H.

• GOLDEN EAGLE •
120 M.P.H.

THE STORY BEHIND THE COVER



From the banks of the Delaware to the western shores of the Pymatuning, Pennsylvania sportsmen and other outdoorsmen who travel the waterways of the state can see more evidence this spring of a program to "bring back the ducks". At suitable locations near the shorelines, they may see oblong wooden boxes nailed to uprights about five feet above the water and if they watch long enough and quietly enough, chances are that a brilliantly colored duck will emerge from or enter into the four inch hole bored in the front.

Encouraged by results of a wildlife research project, the Pennsylvania Game Commission started erecting these wood duck nesting boxes throughout the Commonwealth in the early spring of 1949. Over 700 of these artificial homes were distributed by the Commission's Division of Wildlife Research alone and in addition many sportsmen and interested individuals constructed and erected boxes for their favorite duck marshes and ponds. Capitalizing on the wood duck's distinctive habit of nesting in cavities, and realizing that natural nest sites in hollow trees along our waterways were inadequate, Pennsylvania's wildlife guardians moved in with this simple, effective wood duck housing program.

Game Protectors located in suitable duck nesting areas, like Ray Sickles at the vast Pymatuning marsh, were provided with nesting boxes and all last summer kept track of their use by wood duck hens. Results were encouraging. For instance, Game Protector Sickles, who is shown inspecting a box on this month's cover, reported over half the boxes at Pymatuning were occupied by wood ducks. Where the boxes were used, the ducks were usually able to successfully hatch out good broods of ducklings.

But these men also reported that the biggest obstacle to maximum wood duck nesting box success was the action of well-intentioned but overly curious persons who get too close to the boxes or molest the nesting birds. Wood ducks are exceedingly shy and in most cases will leave their nests never to return if they are disturbed in the early stages of incubation.

Although Pennsylvania may never be a major waterfowl hunting state due to its geographical location and scarcity of major lakes and nesting grounds, there are many things which can be done to improve her waterfowl population. Pennsylvania has moved forward with a wood duck housing program!

PLEASE, NEVER MOLEST A WOOD DUCK NESTING BOX!

PENNSYLVANIA Game News

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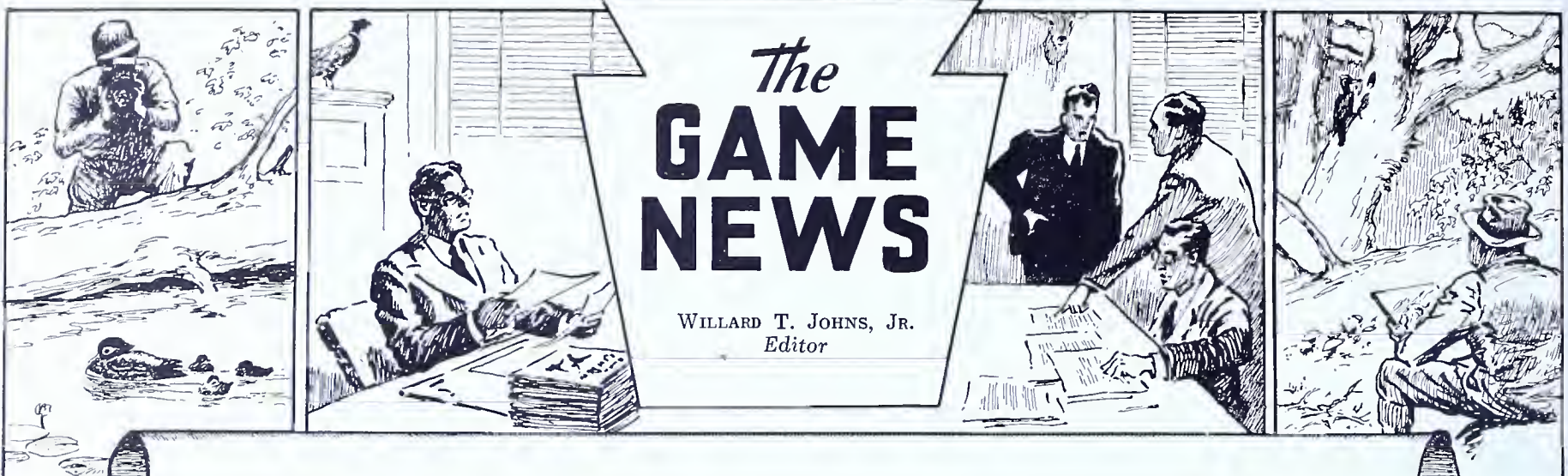


COOPERATION WINS
YOU ARE INVITED TO THE PENNSYLVANIA
HUNTING IS PERMITTED FOR ALL
HUNTERS IN THE STATE
WE WELCOME ALL HUNTERS TO THE STATE
IT IS UNLAWFUL TO
1. HUNT ON PRIVATE LAND WITHOUT PERMISSION
2. HUNT ON PUBLIC LAND WITHOUT PERMIT
3. HUNT ON LAND OF ANOTHER STATE
4. HUNT ON LAND OF ANOTHER COUNTRY
5. HUNT ON LAND OF ANOTHER TERRITORY
6. HUNT ON LAND OF ANOTHER PROVINCE
7. HUNT ON LAND OF ANOTHER KINGDOM
8. HUNT ON LAND OF ANOTHER EMPIRE
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10. HUNT ON LAND OF ANOTHER COMMONWEALTH
11. HUNT ON LAND OF ANOTHER DOMINION
12. HUNT ON LAND OF ANOTHER PRINCIPALITY
13. HUNT ON LAND OF ANOTHER GRAND DUCHY
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PLEASE DO NOT
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2. HUNT ON PUBLIC LAND WITHOUT PERMIT
3. HUNT ON LAND OF ANOTHER STATE
4. HUNT ON LAND OF ANOTHER COUNTRY
5. HUNT ON LAND OF ANOTHER TERRITORY
6. HUNT ON LAND OF ANOTHER PROVINCE
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PENNSYLVANIA GAME ASSOCIATION

P38.34 C.1

MAY 1950

TEN CENTS



The GAME NEWS

WILLARD T. JOHNS, JR.
Editor

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COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR

★

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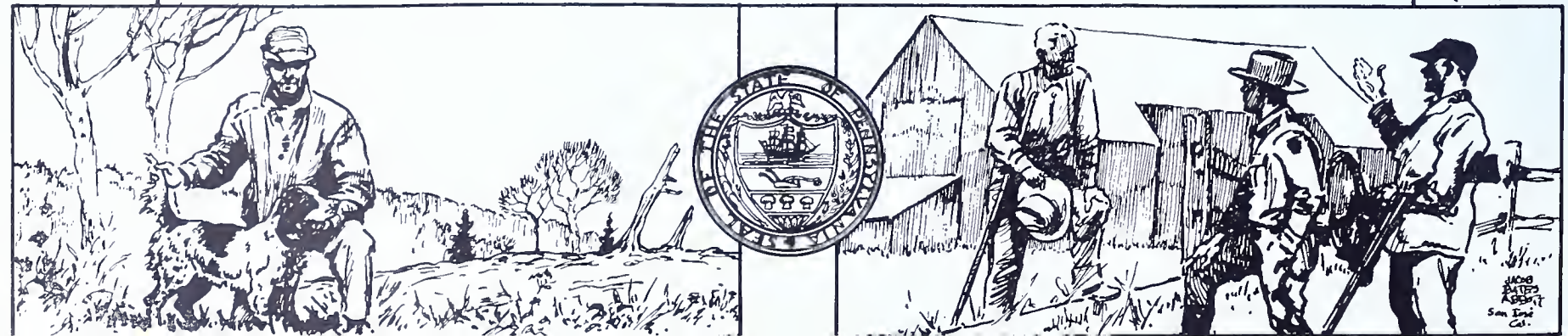
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THE UNNECESSARY PREDATORS

Of all the cruelty in the outdoors, none is more unnecessary than the killing or harassment of wildlife by stray dogs and cats. It represents one of the most appalling losses in nature.

Stray dogs and cats result from human indifference. They are either temporary or permanent wanderers of the outdoors because of the lack of interest, carelessness, or ignorance of a few persons. Most domestic animals are incapable of survival in the wild and return to civilized haunts at regular intervals. Some, however, do become "wild" in every sense of the word. Both types become bloodthirsty, ruthless killers, and, unfortunately, wreak their greatest damage during the spring of the year.

The sight of a pack of stray dogs slowly but relentlessly pursuing and tearing apart an exhausted deer can only be characterized as gruesome and horrible. No crueler death is meted out in nature. Likewise, the deliberate, stealthy pounce of a house cat on a song or game bird and the ripping of feathered skin, the crunching of delicate bone is a sight never to be forgotten or forgiven.

Although some might excuse this type of predation on the basis that dogs and cats kill because of natural instinct, the hard fact remains that domesticated animals are in a position to receive their food without resorting to predation.

That this fact is commonly accepted is plainly shown in both the Game and Dog Laws of this State. The law clearly condemns stray dogs and cats as well as their owners. Every police officer of the Commonwealth is permitted to destroy such animals and it is their assigned duty to kill dogs or cats caught in the act of chasing or killing game in closed seasons. Furthermore, the owners of such animals are held legally responsible for the actions of their pets and may be penalized for the illegal actions of their animals.

Nevertheless, dog law enforcement is always a serious problem, complicated by the understandable love of people for their pets, and entangled in the web of proof of violations. Where possible, and especially when doubt is present, ample notice is given dog owners to control their pets.

Perhaps the most effective solution to the stray dog and cat problem lies in education. Every dog and cat owner should be taught to realize the serious and cruel results of their lack of control over their pets. The problem presents a real challenge to every sportsman and conservationist. With cooperation, interest, and action, stray dogs and cats can be eliminated from Pennsylvania's great outdoors and wildlife can survive to offer more sport, recreation and pleasure to all Pennsylvanians.

CONTROL YOUR DOG AND CAT—SAVE OUR WILDLIFE.



LOOK DOWN

SOMETIMES feel that the outdoors holds nothing more fascinating than some of the woods roads and paths that lead from somewhere to nowhere in particular. You know the kind of road meant—the sort glimpsed from an automobile as you speed by, a track that is seen briefly as it penetrates a cool and mysterious woods and promises adventure. If anything at all—hunting, hiking or plain curiosity—tempts a person to stop and explore it, the road's promise of adventure seldom is fulfilled; but the explorer is always rewarded in some manner.

Hunters—and anglers, too—know them well, these old abandoned lumbering roads, these lanes that once led to now-forgotten and vanished farms, these tracks that run beside streams. They use them, through choice or necessity. So do the State's various wardens, fish and game protectors, private patrolmen and other persons whose work takes them off the paved highways, and an occasional hiker or photographer will set foot on them. Most of the time, though, they are deserted by man, and therein lies their charm.

The oldest of these are those paths that follow the creeks and streams. Sometimes there are two paths, a lower one near the water's edge used by anglers, and one on higher ground where walking is easier. Their origins are lost in the misty past. Water courses always have been natural routes of travel, for animals as well as human beings, and some of the paths that we use today were first grooved into the earth by pre-human, four-legged travellers who found it convenient to stay within sight or easy reach of the water.

An animal travelling in a set direction, and a human being doing the same, will adopt much the same course. Both will avoid the low and marshy or rocky ground near the actual stream bed and take to the higher ground that offers better footing. Fishermen are the only obstinate animals who won't do this, and that's why there often are two paths near a stream. The higher foot-paths most likely were started ages ago by wild beasts.

Best proof of their animal origin are the "deer trails" of today, found in the woods wherever the whitetail is abundant. Some of these meander meaninglessly, but most follow a definite route from one feeding place to another, and usually they go where the walking is best, although a deer's idea of easy walking and a human being's may differ considerably. Nevertheless, they will not choose the roughest way although capable of going almost anywhere except on flat ice. Pennsylvania's ancient woods buffalo must have done much the same, especially when travelling in their regular north-south migrations.

Therefore, the very first human beings who ever reached this region must have found some paths already well-established. It isn't difficult to picture these aboriginal Indians following those paths in their travels, and on their war or hunting trips. They had no horses, and even after horses were introduced into America, the woods Indians never used them, preferring to go afoot or by canoe. The canoes have been much glamorized in fact and fiction, but the Indians who inhabited this section were foot travellers.

So, the *pad-pad* of their moccasined feet packed down the earth still more on some of the old animal trails; but, being reasoning human beings, they sometimes left the stream-parallel path and cut across country to skirt a big U-loop in the creek or river, or to go from one stream to another. Thus, even today we have cross-connecting paths that do not follow water courses.

Some of the trails along the major water courses bore so much Indian foot traffic that the earliest white explorers marked them on maps and sometimes even gave them names—the first "highways" in America other than the canoe routes. In eastern Pennsylvania, some of the streams were heavily travelled by the rather peaceful Delawares, Munsees, Lenni-Lenapes and Susquehannocks. North were the somewhat more aggressive Iroquois and Hurons, and west across the Alleghenies were Indians who had contact with the Plains Tribes.

Anyone who thinks of Indians as feathered savages is doing them an injustice. They had a high culture that was not much below that of the Europeans who first encountered them, and there was trade among tribes that weren't even on exactly friendly terms, just as we today trade with nations that might be our

enemies tomorrow. Hence, any major stream that ran north and south or east and west had its Indian trail on one or both sides of it. The highways and canals that border the Delaware River undoubtedly traverse ground trodden by many moccasins. The Susquehanna Trail was used long before the automobile appeared; long before the first wheel was seen in America.

In a primeval forest, there are only two places where travel is possible on fairly level ground. One is on the ridges of mountains, and the other is along stream basins. The Indians used both, but preferred the routes near streams for reasons that anglers and hunters of today will appreciate. Wildlife is most abundant near water.

Perhaps the Indians of the Chesapeake Bay country had shells which tribes to the north wanted for wampum, ornamentation and other uses. Perhaps the Indians of the north had superior stone for making arrowheads or for working into pipes, or else a bit of copper which they, in turn, had secured through trade with Great Lakes Indians. Trade was inevitable, so there was traffic north and south. When game and food were exhausted in one area, the Indian tribe simply moved to a new hunting grounds—and they moved along the rivers and streams.

When the first white men arrived, they naturally followed the Indian stream-side trails when they travelled afoot into the interior. Curiosity—which is another name for exploration—led the very first ones along these trails, but then trade, in the form of the white man who wanted Indian furs, increased the use of these trails. Later, surveyors cut their own paths through the forest, and then roads followed; but the earliest traders and settlers added the impress of their feet to the paths that run beside the waters.

Therefore, whenever I hunt, or fish, or simply walk along a trail beside some stream, I feel that I am walking with history, and can almost hear the tread of countless feet in other centuries that have helped wear into the earth the groove I follow, packing it so hard that little grows on it even today, and sometimes even cutting a pronounced track across solid rock. At such moments, I walk softly, so that I do not disturb the past.

More than once, I have surprised deer following exactly the same stream path in the mountains, and I would not be greatly startled to come upon a file of woods buffalo, an Indian trading party or a tribe on the move, a lean frontiersman or a Colonial exploring party. In fact, I almost expect to see them.

These trails along streams and cutting across country follow a straight course wherever possible; but occasionally the path inexplicably will deviate from the straight and make a half-moon detour before returning to the course again. There is no apparent reason today for such a strange departure from the maxim that a straight line is the shortest distance between two points; but when I come to such a semicircular detour which has no obvious explanation, I know what has caused it and I am sobered by the passage of the centuries that that particular path has known.

At some time, so long ago that all evidence of it has vanished, a fallen tree or other obstacle led travellers of the past to leave their straight path and skirt around the object. The fallen tree has rotted and disappeared these many years, so that it would be possible to follow a straight course again—but we never do. We always follow the rut worn by long-dead travellers who once had to go around that vanished fallen tree.

Before leaving these stream and woods paths, there is one thing that should be mentioned. Persons who spend much time walking along them subconsciously keep them open. The forest is always trying to close them by spreading encroaching branches across them from trees and brush, by rhododendron and laurel interlocking above them, by letting boulders and deadfalls land on them. Without consciously thinking of what he is doing, the experienced woodsman who ever expects to use the same path a second time breaks back branches, kicks boulders and deadfalls aside if he can, or else skirts the larger ones. Men who must use such trails a lot even carry axes occasionally to cut through the larger stuff.

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THAT LONESOME ROAD

By BILL WOLF



They're Dead Before You Fire a Shot

By WILFORD L. MILLER

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"CUT DOWN the bag limit this year." "Shorten the hunting season five days and restrict shooting hours." "Birds are getting scarce—we must save them!"

Hunters and conservationists across the nation discuss these problems year after year. And unless some catastrophe occurs—such as a blizzard which kills most of the game birds—some sportsmen will not look much farther ahead than the next hunting season. When the subject of conservation comes up, the hunting regulations seem to be the all-important thing. Sportsmen are convinced that their guns determine the increase or decrease of bird populations. Second might be the foxes and those other predators that supposedly are taking all the birds.

Do you hunters want to know how important you are in affecting the ups and downs of some of our game species? Let's look at a few facts about the pheasant for an example. For several years North Dakota has gathered mass data from nesting studies, roadside surveys, hunter kill records, winter mortality investigations, and other sources to find out how pheasants live and die.

Graphically the picture looks like this. Half of all eggs laid will never hatch! Half of all young birds that do come out of the eggs will be dead before fall. Winter will add its toll to the

natural mortality—roughly 5 to 10 per cent. The spring breeding stock must be maintained. The surplus in normal years the hunter can take. His share may be 5 to 10 per cent, approximately equal to the natural winter kill. Rather a small slice of the potential bird population, isn't it?

What happens to all the eggs and young birds? A complete list of all the factors of mortality would make you wonder how any birds survived. Here are a few of the destroyers: adverse weather during critical hatching periods; hail, rain, floods, drought, blizzards; plowing, seeding, mowing, and other agricultural operations; accidents from traffic, collision with wires, and numerous other causes; bacterial, fungous and parasitic diseases; periodic food shortages; predators including the fox, coyote, skunk, badger, mink, raccoon, dog, house cat, owl, hawk, eagle, crow and many more.

Look at this partial list of destructive agents and you will not be amazed at the results revealed by some of our nesting studies. During the past two years only 14 per cent of all pheasant nests under observation were successful! Fortunately the pheasant is a persistent renester so a larger percentage of hens finally brought out broods. Incidentally, these nesting studies were carried on in a part of the state where there are no red foxes.

What is the biggest factor in egg losses? No, it's not the predator! In most states agricultural operations account for the biggest loss—up to 75 per cent of all nests destroyed. Skunks, house cats, badgers, and other predators take a share. Early in the season when cover is sparse, the crow may be enemy number one.

Most game managers agree that weather is the determining factor of juvenile mortality. Favorable weather in May and June is one of the most vital factors affecting the survival of young upland game birds. Cold, wet hatching periods usually result in fewer young birds in the hunters' bags in the fall. Since the normal life span of most upland birds is about three years, a succession of two or three unsuccessful hatching seasons will be disastrous.

Even after the broods are fully grown, natural mortality continues every day. If the surplus is to be harvested by the hunters, the sooner the season can be opened the more birds will be available for the gun.

The next period of high natural kill occurs during the winter months. Starvation is not the chief cause of winter loss as is popularly believed. In fact, starvation is a rarity even in the northern states during years of heavy snowfall. Where winters are severe the availability of adequate cover during blizzards is the limiting factor. On the prairies where all the low growing vegetation becomes covered with snow, the woodlots and brushy growth remain the only choice. Grouse will burrow into the snow for protection but pheasants remain on the surface and suffocate from wind-driven snow if not near shelter. Winter losses normally are not heavy but a series of blizzards may seriously deplete an area of its pheasant brood stock.

Add up the losses of eggs, juveniles, and adult birds through the year and we don't have much of the potential populations left. Subtract the birds needed for the spring breeding season and the remainder may be harvested. This small surplus—the 5 to 10 per cent—has been receiving the biggest part of our attention during past years.

We know that hunting restrictions alone cannot bring back the birds—merely protect what we have. In the face of constantly diminishing bird populations we must turn our attention from that small 5 or 10 per cent the hunter takes to 75 per cent killed otherwise. We should be trying to reduce "egg mortality" and "juvenile mortality." Sportsmen and game managers must realize how even a very slight reduction in these fields or mortality will result in a tremendous increase in birds available to hunters in the fall. For example in a brood of 12 pheasants, if 3 individuals could be made to survive instead of 2, there could be a doubled population in two years.

We have too much time and money recorded on the wrong side of the balance sheet. We must do more work to increase the

16 Pheasant eggs — 
 - 8 that never hatch = 
 - 4 chicks that die before fall = 
 - 2 birds needed for breeding stock = 
 - 1 victim of winter mortality = 
 1 bird — 
The Hunter's Share!

percentage of eggs hatched and of young that survive at the same time that we are trying to regulate the shootable surpluses. Otherwise we are going to find no surplus to regulate some of these years.

Egg mortality, the largest item of loss, should receive first consideration. Improvement of nesting facilities offers one of the greatest possibilities for increased bird populations. Successful nesting is largely a matter of undisturbed cover. Uncontrolled burning and "clean farming" are enemies of the birds. Unused fence rows, corners protected from grazing, road sides, woodlots, and similar places should be suitable for nesting. Hundreds of small places will be more productive than one or two large areas in a community.

Man is directly and indirectly responsible for the greatest losses in eggs. Agricultural operations destroy most of them each nesting season in the habitat that is left for game birds. Through the years, agriculture and other industries have taken away most of the suitable environment. Some years nature gives the birds a break by providing extra nesting cover. Again economic conditions may counteract nature's helpfulness. Here is an illustration.

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Photo by John Martin

We must do work to increase the percentage of eggs hatched and young survival.



Predators, like this skunk, take their share of eggs, but "man is responsible for the greatest losses in eggs."



You Weasel!

By JACOB BATES ABBOTT

LEST there be any misapprehension, let me open this discussion by stating at once that I have a warm spot in my heart for weasels—at least, for one weasel. After the howls of the poultry ranchers and rabbit fanciers have subsided, I'll tell you the reason. Ten years ago we were occupying a pre-Revolutionary house, seventeen miles out of Philadelphia in the midst of some of Chester County's best fox-hunting country. The place had a small stream on it, several gardens and some of the biggest rats I've ever seen alive. Disused fox-hound kennels on adjoining land had attracted them. In spring and summer it was not so bad—the rats stayed outdoors most of the time; but in winter they really took over the house. One couple of newlyweds chose the sound-box of a grand piano as a homesite and six young were born in it before we discovered the nest, tastefully composed of newspaper fragments. I had so much rat poison on bits of bread in corners of the kitchen and laundry that the place wasn't safe. The cellar looked like a hardware store just before the trapping season opened. I caught one rat. But, early in March a weasel (the big stoat, or New York weasel) put in an appearance and in one afternoon that blessed mustelid cleaned out the entire rat colony. He went through their tunnels and runways like a flame-thrower through the Jap caves in the recent unpleasantness on Okinawa. We never again had a rat on the place.

JACOB
BATES
ABBOTT

Without bothering about whether anyone would beat a path to her door or not, Beldame Nature devised the two best mouse-traps in existence when she produced the barn owl and weasel. A couple of weasels around a farm will clean out the rat and mouse population and put dollars and cents into the farmer's pockets by destroying these pests. If there are vermin in the animal world (which may be doubtful, for probably all species of wildlife have their specialized jobs in the great Natural Scheme), field and house mice, cotton and brown rats would certainly get the official nod in the east. Excepting destructive insects, these rodents cause more damage to the householder's and farmer's provisions and crops than any other agents of the wild.

Mr. John James Audubon, who has some reputation even today as a naturalist of parts, writing in 1842, has this to say on the ecology of weasels: "Notwithstanding all these mischievous and destructive habits, it is doubtful whether the ermine is not rather a benefactor than an enemy to the farmer, ridding his granaries and fields of many depredators on the product of his labor, that would devour ten times the value of the poultry and eggs which, at long and uncertain intervals, it occasionally destroys. A mission appears to have been assigned to it by Providence to lessen the rapidly multiplying number of mice of various species and the smaller rodentia . . . Whenever an ermine has taken up its residence, the mice in its vicinity for half a mile around have been found rapidly to diminish in number . . . The ermine is then of immense benefit to the farmer. We are of the opinion that it has been over-hated and too indiscriminately persecuted."

There is no doubt that the average weasel does not confine his activities to controlling rats and mice. He will sweep through a chicken coop or rabbit warren like the Grim Reaper, leaving devastation, headless chickens and bloodless rabbits in his wake. The smell or taste of blood apparently drives him berserk and the little devil kills everything in sight once he has bitten through a pullet's skull. But—and mark this—he is no furtive, sneaking, "up-a-dark-alley - with - a - lead-pipe" thug. He tackles food on the hoof six times his size and weight. A buck rabbit can put up a good fight, and often does, with another buck bunny. A snowshoe or arctic hare could kick the life out of a half-pound long-tailed weasel. (Snowshoes weigh five pounds; arctic hares up to ten pounds.) But what does the dumb bunny do? With a weasel on his trail, a rabbit runs in circles, when a straightaway race would put him out of danger in a couple of minutes. Then, with his pursuer's breath hot on his neck, he huddles in a spineless flop, whimpering and screaming. He literally asks for it—and the weasel invariably complies with his request. Now, a two-pound cottontail weighs three times as much as a big New York weasel; a five-pound snowshoe hare is seven times the stoat's weight. Why is it that the universal reaction to weasel vs. rabbit is "Oh, the poor bunny."? Certainly the weasel is no coward; he's taking on an opponent much bigger than himself, and an opponent by no means defenceless. As a matter of fact the weasel's boldness, prowess and efficiency against such odds as a big mongrel and the dog's master, homo sapiens, the heir to the ages—man

himself—are not equalled in the animal kingdom. If a weasel was the size of an airedale it wouldn't be safe to go into the woods.

Much has been written about the superlative bloodthirstiness, the joy of killing, the wanton blood baths indulged in by weasels. We compare the little mustelid to human gangsters and doped-up killers; we project our human emotions into the weasel's actions and come up with all this talk of murderers, pitiless vampires, "flaming-eyed were rats," etc., etc. To carry the human equation a little farther, I'll give you eight to one that there isn't a weasel alive who would not hang his head in shame if he were compared to some of the really cold-blooded killers who have recently been torturing churchmen, American business men and some of their own countrymen in the prison hell holes in Roumania, Bulgaria and Poland. The weasel could learn plenty, too, from the hired thugs who run the Siberian salt mines, to say nothing of the human dregs into whose murderous hands were entrusted the bodies and souls of a million or more human beings in the Belsen and Buchenwald slaughterhouses. When we attribute to the animals human characteristics we are assuming something that is quite unnatural. Also, it is distinctly unfair to the quadrupeds.

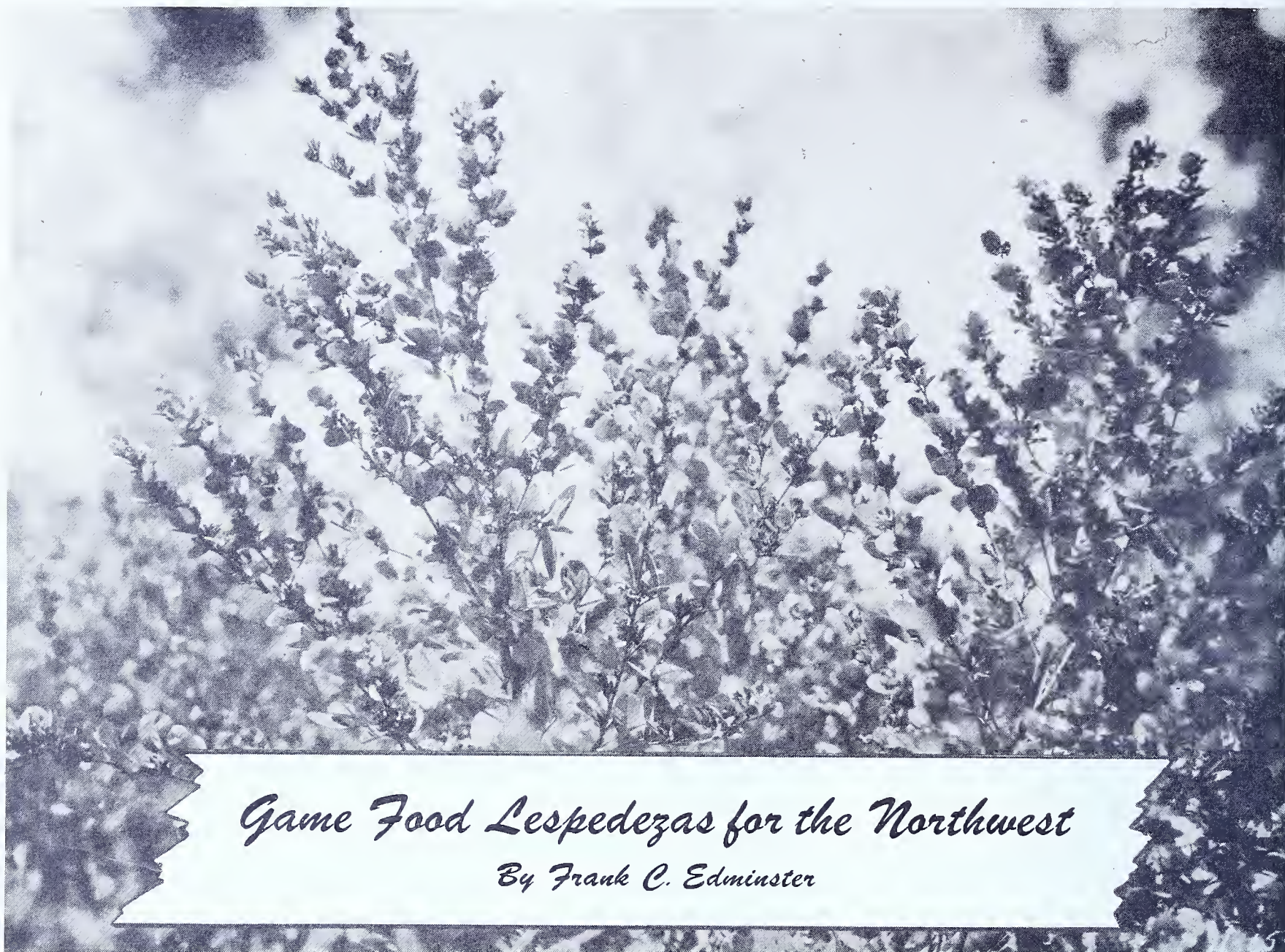
Instead of planned mass murder, which can be only the invention of a debauched human brain, the weasel's promiscuous killing probably stems from some instinctive impulse to accumulate more prey than he can possibly require for his food. This he is equipped to do by nature in superlative fashion. Let me quote Dr. Elliot Coues' description of this small carnivore, one of the best word pictures of an animal that has yet been written: "A glance at the physiognomy of the weasels would suffice to betray their character. The teeth are almost of the highest known raptorial character; the jaws are worked by enormous masses of muscles

covering all the side of the skull. The forehead is low, and the nose is sharp; the eyes are small, penetrating, cunning, and glitter with an angry green light. There is something peculiar, moreover, in the way that this fierce face surmounts a body extraordinarily wiry, lithe and muscular. It ends a remarkably long and slender neck in such a way that it may be held at right angle with the axis of the latter. When the creature is glancing around, with the neck stretched up, and the flat triangular head bent forward, swaying from one side to the other, we catch the likeness in a moment—it is the image of a serpent." Yet a weasel in repose can look amazingly innocent; unquestionably he is a handsome creature, all umber and cream in his summer coat and in winter he has the almost decadent beauty of a death angel, the deadly white Amanita.

And don't think that these lithe beasts, weighing little more than half a pound (a big New York weasel will go to 12 ounces), tackle only mice and rabbits or inexperienced young broilers. They aim for the jugular vein and will attack anything that walks or flies, particularly if they think they are cornered. Field naturalists', woodsmen's and hunters' records are filled with instances of weasels attacking men. An amusing record of this is found in Seton's "Lives Of Game Animals," Vol. 2, part 2, p. 631: "On September 5, 1897, I was out near Medora, N. Dak., on Theodore Roosevelt's old ranch, with several men on a wolf hunt. At night, as we were about to roll up in our blankets, a member of the party called out, 'Say, Jack, there's a pack rat just run under your saddle.' As a pack rat is a notorious mischief-maker among leathers, Jack went over and gave the saddle a kick. Then we heard him gasping, swearing, and finally shouting for help. In the dim light, we could see him dancing like a maniac, and clutching at his

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Game Food Lespedezas for the Northwest

By Frank C. Edminster

LESPEDEZA has become a magic word. To the southern farmer it has come to mean better forage for his livestock and improved soils. The soil conservationist uses many of the lespedezas for effective erosion control and soil building. To the sportsman it has come to mean better food and cover for bob white quail. And now, with the promise of improved varieties of some of the shrub species, it holds the possibility of much needed help to the pheasant and other farm game species.

Food Value of Lespedeza Seeds Important

The great value of the bush lespedezas lies in the food provided by their seeds for farm game. Most shrubs offer only starvation food in the winter for such birds as the ringneck and bobwhite. Few perennial plants of any kind are high grade pheasant food but the shrub lespedezas may well fill that niche. They are easily established and cost little to maintain, virtues not possessed by food patches of corn and other grain foods.

Shrub lespedezas have no obnoxious qualities for the farmer and they do have many advantages. Used in borders along the boundaries between cropland and woods, they hold the spread of trees in check while permitting the crop plants to thrive up to the very edge of the field. This avoids the unproductive and frequently eroding condition of crops grown close to a woods edge. These lespedezas are attractive in flower and are good quality honey plants in late summer. Their wildlife food and cover benefits are there indefinitely once they are well established. They never spread to become pests.

The use of the shrub lespedezas is too new to have attracted the attention of the geneticist. Consequently attempts to secure kinds adapted to the Northeast has been a matter of diligent search and careful observational study on the part of those primarily concerned with their application to the problems of soil conservation and game development. The Biology and Nursery Divisions of the Soil Conservation Service in recent years have assembled and tested a great many species and strains and it is the methods and results of some of these trials with which this story is concerned.

Lespedezas a Genus of Legumes

Before going into the details of finding game food shrub lespedezas for the Northeast, let's place the matter in perspective by looking over the background of the whole lespedeza tribe.

To begin with, *lespedeza* is the name of a genus of plants belonging to the legume family. The legume include many valuable human foods such as peas and beans, and many of the best soil building plants, as the clovers, trefoils and alfalfa. Legumes include trees, such as the locusts, shrubs like the indigobush, perennial herbs and annuals. The genus of lespedezas has shrubs, perennial herbs and annual herbs, missing only the trees. Like many other legumes, the lespedezas have bacteria nodules on their roots that aid in soil building. These bacteria have the amazing ability to convert nitrogen from the air into a form usable by plants, a fact of great importance to agriculture.

Lespedezas Native to Orient and America

The lespedezas that have become useful in agriculture and conservation are all oriental in origin, coming from Formosa, Japan, Korea, China, Manchuria and India. There are quite a few native American lespedezas, all perennial herbs. It is rather ironical that none of the native kinds has yet been utilized successfully in plantings. These indigenous species occur as scattered plants on old fields and in waste places. Many of them have been tested for wildlife and soil conservation purposes but without success. They appear to have little value as game food and have not made satisfactory plantings.

Originally the shrub lespedezas were brought to this country as ornamentals just as dozens of other landscaping plants have been introduced. Their popularity for this use has been quite limited, although in mass plantings they are very attractive. The commonest one, bicolor, is rather frequently found in home yards while the others have been limited largely to botanical gardens.

Annual Lespedezas Cultivated for Hay

The first lespedezas to receive prominence in this country were the annuals known as Japan clover or common lespedeza (*Lespedeza striata*), and Korean lespedeza (*L. stipulacea*). They have become standard hay varieties in the southern states, reseeding very readily even though the plants all die each winter. Both of these lespedezas have become important quail foods on crop fields throughout much of the range of the bobwhite but they do not provide much cover. They are hardy only as far north as Maryland and southern Illinois.

Next lespedeza to come to the fore was *sericea* (*L. cuneata*), a perennial herb. It was sponsored by soil conservationists and wildlife men beginning about fifteen years ago. Much used for erosion control on worn, gullied land, and along field borders in the southeastern states, it makes excellent nesting and roosting cover for quail. Its seeds, however, are only a low grade food eaten only occasionally by the birds. It has about the same range of use as the annuals.

Bicolor First Among the Shrub Lespedezas

Not long after *sericea* became famous, *Lespedeza bicolor* along with other common woody lespedezas were included among the dozens of kinds of shrubs tried out for erosion control and wildlife cover by biologists of the Soil Conservation Service. Like *sericea* they had no popular names, only the Latin scientific names. Just as the Latin *sericea* became a part of our English usage, so the name *bicolor* has been added to our conservation repertoire for *L. bicolor*, the first of the shrubby lespedezas to prove its worth for game food and cover plantings. For a while it was called "shrub lespedeza" or "bush lespedeza," but it was soon apparent that this would not do. There were other promising species of shrub lespedezas too. What would we call them? There were *Lespedeza cyrtobotrya*, *L. formosa*, and *L. thunbergii* being planted in the late thirties. Some of the Latin names converted easily into English, as *Formosa* lespedeza and *Thunberg* lespedeza, but what about *cyrtobotrya*? That's too tough for everyday use; and then there's *L. maximowiczii*! But the name to remember now is BICOLOR.

Among the first to recognize bicolor as a valuable soil conservation plant and game food was Verne Davison, Regional Biologist for the Soil Conservation Service in the southeastern states. He particularly urged its use on field borders. As the value of the plant for field borders became fully appreciated and its first rate quality as food for bobwhites demonstrated, its use spread rapidly. In addition to its use as a border zone between cropland and woods, it was planted in managed hedges and in woodland clearings. Everywhere tried, from Maryland to Missouri to Mississippi, it proved a valuable asset in improving quail hunting. In fact, it has revolutionized bobwhite quail management in much of that bird's range. Today it is being grown and planted in quail country by most of the state game commissions as well as by the Soil Conservation Service.

Many and Varied Shrub Lespedezas

There are more than twenty different named species of these shrubby lespedezas, the exact number being a bit hazy—depending

USCS Photo

Field border seeding of bicolor lespedeza three years old. It completely dominates the zone it occupies, protecting the crop field from encroaching trees. Good results can be gotten with either seedings or plantings of nursery seedlings.



USCS Photo

Shrub lespedezas may be used in contour hedges across crop fields, in woodland clearings, and on any small areas where game food and cover is desired, as well as on field borders.

upon which taxonomic botanical authority you follow. It really makes little difference to the conservationist, however. We'll use any of them found suitable to our purpose regardless of their botanical names.

The different kinds vary greatly in growth habit. In height they range from three to ten or twelve feet. They have compound leaves with three leaflets that vary in shape from blunt oval to long pointed. The seeds vary in size from about a sixteenth to an eighth of an inch long and in color from a mottled brown and purple to black. There is but one seed in each pod. The pea-like flowers range from light pink to lavender and occasionally white and bloom during the last half of the summer until early fall.

Northern Use Restricted by Late Seed Maturity

The farther north lespedezas are used, the earlier come the killing frosts and the less likely are the seeds to attain ripeness. If the seeds do not ripen there is no food for quail or any other seed eating game bird. In observing early plantings it was soon discovered that those in Virginia, West Virginia and Maryland had poor seed crops in some years. Most of the plantings made in Pennsylvania, New Jersey and southern New England produced a seed crop only occasionally, in years of delayed frosts. This limited area of use made the common strains of the lespedezas then available of little use to the ringneck pheasant since they could not be depended upon to make seed in most parts of the pheasant's range.

Pheasants Shown to Thrive on Bicolor Too

During the same period, the late thirties and early forties, when some of the facts regarding the use and range of the shrub lespedezas were being learned, tests and observations were being made on their possible value to other game species besides the bobwhite. Feeding tests with both quail and pheasants were conducted co-operatively by the Pennsylvania Game Commission and the Soil Conservation Service using both bicolor and *L. cyrtobotrya*. They showed that both birds liked the seeds of both these species and that the feed was as good nutritionally as scratch grain in sustaining the birds' weight in winter. Subsequent tests by the U. S. Fish & Wildlife Service at Patuxent Research Refuge in Maryland have shown that quail like some of the other kinds of shrub lespedeza seeds about equally well. Field observations have also established that the leaves and bark of bicolor are good foods for deer and cottontails.

The findings that the common strains of the shrub lespedezas then in use—*bicolor*, *cyrtobotrya* and to a lesser extent, *thunbergii* and *formosa*—failed to produce dependable seed crops in most of the pheasant's range stimulated our search for a good bush lespedeza that would do so. Pheasant management direly needs a perennial food plant to improve the winter habitat. The need and desire for better lespedezas for the more northern range became so urgent that concerted effort was begun to locate or develop suitable kinds.

Improvement Methods

Realizing that only a few of the shrub lespedezas had been tried

(Continued on Page 29)

AN INTRODUCTION TO STOCKMAKING

THE principal fault of most books and articles on gunstock finishes is that they contain too much information. By the time the amateur stockmaker has finished the first page he is invariably lost in the maze of hints, "secrets," instructions, recipes and formulas, and the usual result is a plain varnish finish straight from the directions on the can.

In order to eliminate this confusion I'll attempt to describe only a few simple, but practical finishes. From this group you should be able to find one that suits you.

Before we get too far under way let's settle this argument about what constitutes a good stock finish. Most gun cranks agree that the most desirable characteristics are as follows:

By E. STANLEY SMITH

PART V: FINISHING THE STOCK

1. Protection.
2. Durability.
3. Beauty.

Naturally, the ability to protect the wood from the deteriorating effects of moisture, etc., is the primary requisite. A finish must also be durable—retaining both its good looks and its protective qualities indefinitely. As for beauty, this characteristic is a must. No treatment, regardless of its other qualities, should be considered satisfactory unless it greatly enhances the appearance of the gun. It must be neither black and lifeless, as are too many oil finishes, nor boldly shiny,

like a cheap varnish finish. It should have a smooth, flawless surface with a soft luster—accenting, rather than dimming the color and figure of the grain.

For years admirers of firearms have kowtowed reverently at the mere mention of a London Oil Finish, haughtily ignoring other really admirable stock finishes. So blinded were they by the glowing reputation of an oil finish that they would have no other, yet not one in ten would know an oil finish if they fell over it. In recent years a few of our most gifted stockmakers have risked being drawn and quartered by debunking this myth, and the oil finish is now known for what it is—possibly the finest finish extant, but assuredly not the *only* good one.

The oil finish has its share of faults. For instance, it will usually ruin a soft, porous stock because this type wood soaks up too much oil, darkening the wood to such an extent that it practically obliterates the natural color and figure. There are ways to prevent this darkening, but they are not always satisfactory. Then too, if applied during humid or damp weather there is a chance it may retain a measure of stickiness that is not exactly desirable. Another disconcerting feature is the fact that rain drops will often cause white spots to appear in the finish. The chief objection, however, seems to be the length of time required to complete the job.

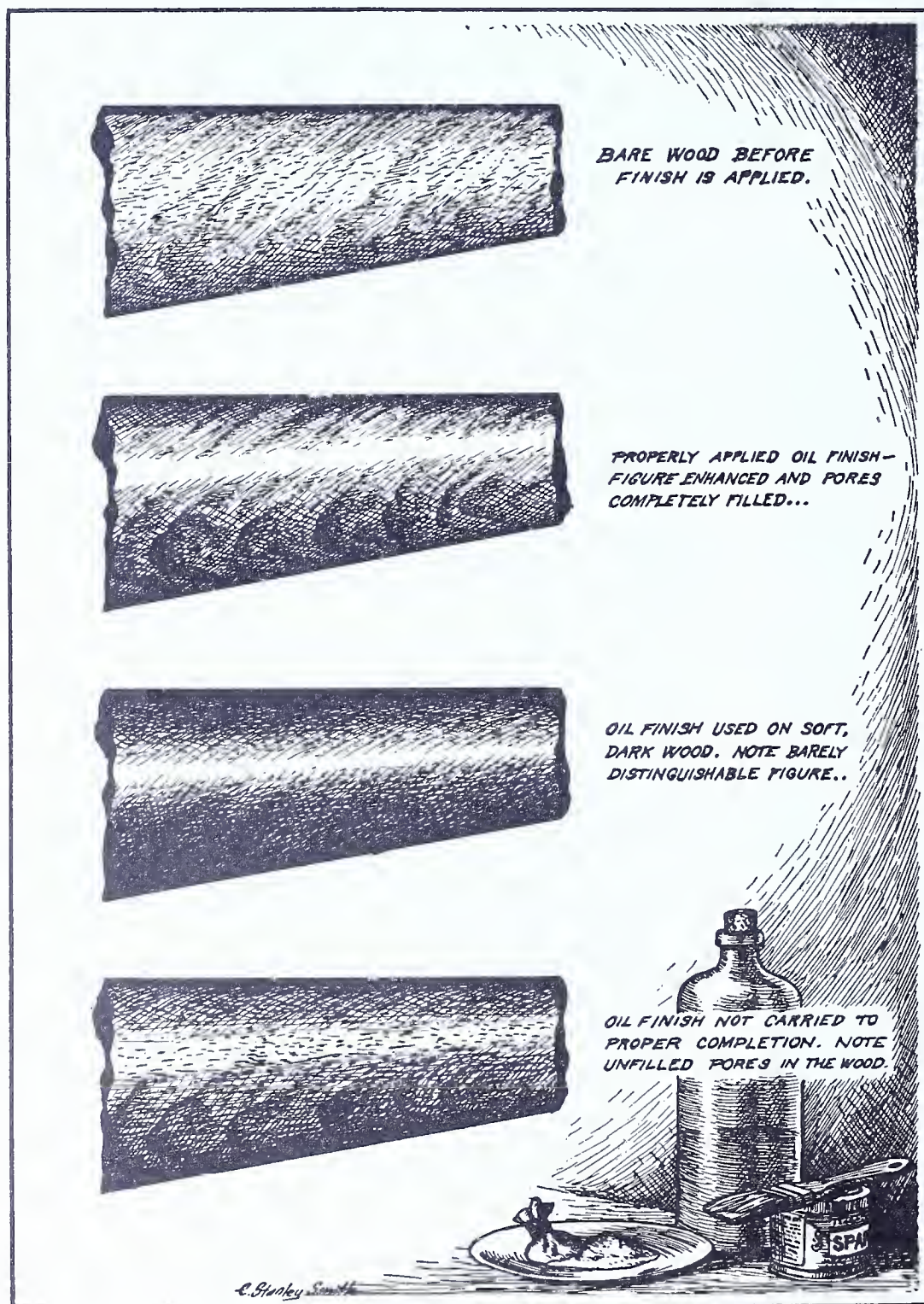
On the other hand, a London oil finish, properly applied to the right kind of wood, is unmatched in beauty—it enriches the wood in a way unequalled by any other. It penetrates deeper than most other finishes; consequently cannot peel or chip off and expose the wood to the action of moisture. Because of this characteristic it will not exhibit the unsightly scars often found on ordinary varnish finishes after being scratched or scraped.

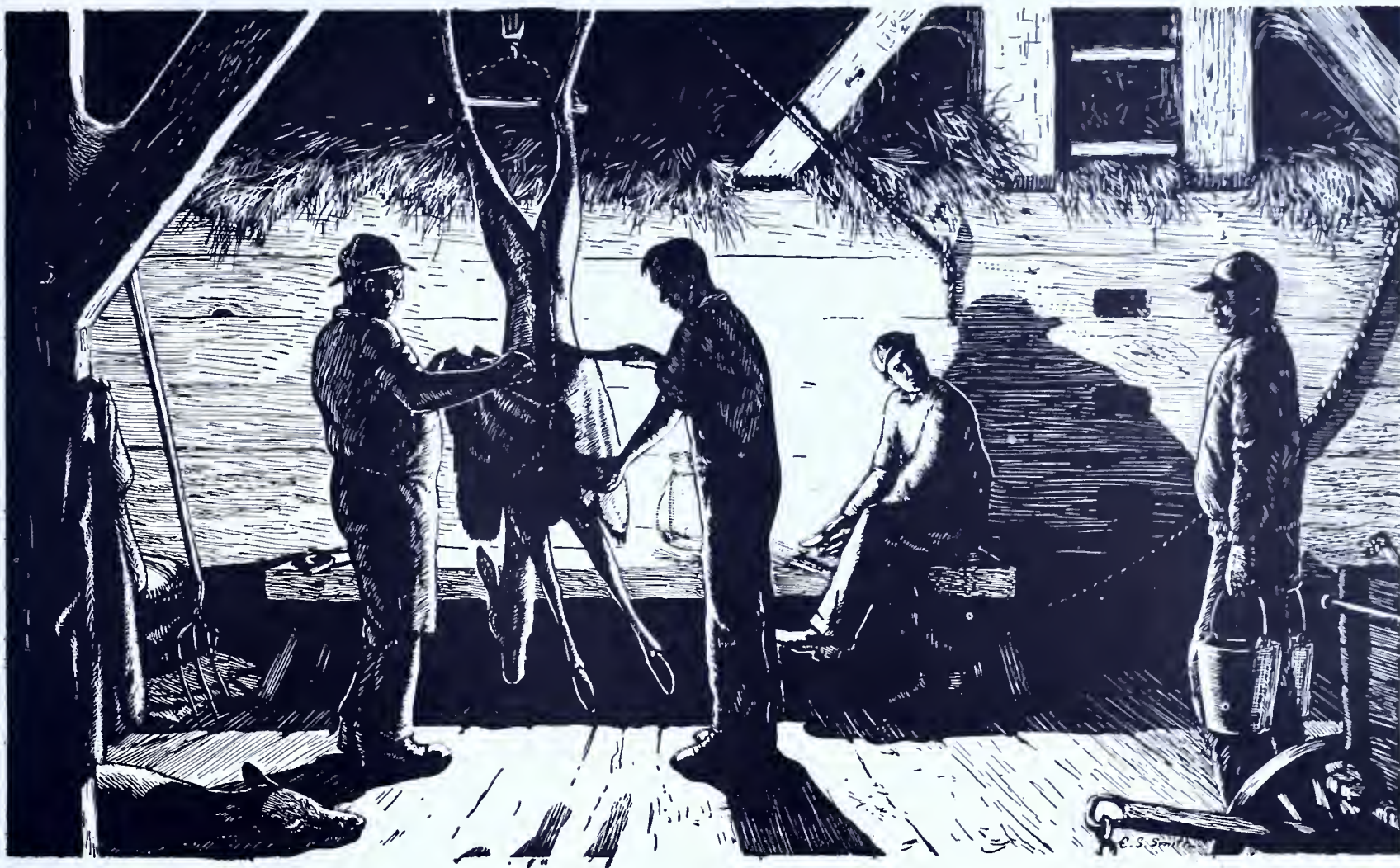
A good oil finish is not difficult to produce. The first step is to swab a generous amount of raw linseed oil on the stock, applying enough so that it drips off the wood. By heating both the stock and the oil beforehand penetration will be greatly increased. Allow it to stand for at least a week—the oil must all be absorbed and completely hardened. If the wood is exceptionally hard and light in color repeat the application of hot oil and allow it to harden as before. Remember throughout the treatment that before each coat of oil is applied the preceding coat should have been allowed to dry thoroughly. If this isn't done the finish will always be a bit sticky and the wood will absorb far too much oil.

When the raw oil has hardened rub on a moderate coating of boiled linseed oil and allow it to dry for at least several days. Don't use too much oil—just enough to leave a thin coating on the wood.

Continue these applications of boiled oil, rubbing each one into the wood with the palm of the hand. If the coat builds up faster on the sides of the stock than on the

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HIDES IN THE WELL

By MILES L. REEDER, Game Protector, District E-17

THE "Old Oaken Bucket" was not the only thing in the well.

One September morning in 1926 I started on a hunting trip that took one and a half months to finish. The trip kept me from hearing a broadcast of the first "Dempsey-Tunney Championship Heavyweight Fight."

I hunted on Spruce Run in Union County, on Pine Creek at the border of Centre and Union Counties, and on Elk Creek in Centre County.

When I hunt, I always keep a weather eye open for all signs of game-law violations. I noticed an open well on an abandoned farm. A duty of a Game Protector is to see that open wells are covered.

Therefore, I secured a long pole to determine the depth of the well. As I stirred the water, I found the well was the dump for a group of deer killers. I counted seven hides. There were other "hides" I was hunting from that moment on.

The first step was to find the owner of the farm. The owner was determined. A hunting camp that was being used more than usual was found.

One evening, after a rain shower, I followed car tracks to the farm. My belief was that the well, the farm house and the hunting camp were all being used for the illegal hunting of deer in that valley. My thoughts were correct.

Those were the days of the Model T Ford. I used a small pick-up truck. I hunted HIDES nearly every night for six weeks.

Assistance was given to me from the Supervisor's Office and by Game Protectors from neighboring counties.

The hunt was carried on silently and carefully in all kinds of weather. Frost, rain or sleet did not stop us. The culprits killed deer, butchered them and also made moonshine. Illegal deer hunting and illegal liquor distilling seemed to be the most important events in the lives of these men. Every few evenings some other man who thought he was a good citizen and whom the community respected would join the outlaws.

We entered the barn one evening and waited for the outlaws to come to butcher a deer. If we had coughed, or sneezed, or moved, when they prepared for the butchering, we would have scared them to death as the average outlaw is a coward. We lay 35 feet away in the haymow and looked down on their actions. The lanterns furnished enough light so every one could easily be recognized.

They carried the water needed for the butchering from Elk Creek—two pails at a time. When the butchering was finished and the spoils divided, the hide was thrown into the well.

The time for immediate action had arrived. I notified my Supervisor's Office at Lewistown from my home at Mifflinburg and told him the kill was to be made. He said, "Tonight is the big fight." I said, "This fight will be big enough for us."

We lost no time and soon arrived in

Millheim, Centre County, with a warrant for one of the leaders of the illegal group.

We explained our mission. The outlaw complained of a bad headache. The effects of the illegal liquor were present. His wife entered the room. When she heard the story she said, "I am glad you have come as my husband loves to spot-light and kill deer more than he loves me. The desire to kill has so grown on him and his friends that the group is neglecting their homes. We wives have nothing to do except to sit at home."

As we went from house to house, store to store, office to office, evening was approaching. The hour of the Championship Fight arrived. If we desired to hear the broadcast we would have to go to Bellefonte.

However, our work came first. We thought the best man would win the fight, and we thought we would do our best to break this illegal group for the benefit of all sportsmen.

When the twenty-sixth outlaw had paid his fine of 100 hard-earned dollars, we explained and described their actions to a group of them. We gave them the license numbers of the cars that had visited the farm and the cabin, the dates they had killed deer, the number of deer killed, the jokes they told, who they thought would win the Championship Fight, who carried the water, and how many hides were in the well.

The owner of the farm stepped forward and said, "Where in heck were you?"



OUTDOOR KIDS

By HAL H. HARRISON

THE children found the nest of the grouse quite by accident . . . the way most folks find the well-hidden home of this shy woodland bird.

It was only a few feet from a path which the youngsters used often when going and coming from Little Buffalo Creek. But it was hidden under a log and at a point where it would not likely be disturbed by humans.

Indeed, it was only because Billy decided to jump over the log instead of walking around it that they found it at all.

"Holy smokes, what was that?" cried Billy as he heard a roar of wings and then saw a big brown bird vanish in the hemlocks on the hill above.

"Looked like a pheasant or a grouse to me," Jane answered. She had been standing on the path and had seen the bird flush.

"I don't think a pheasant would be around here. Must have been a grouse," Billy declared.

The children were just about to walk away when Jane suddenly turned to her brother and asked:

"Billy, do you suppose that bird was on her nest? She never flew until you were almost on top of her. Do you think we should look?"

"Well, I guess it's time for grouse to nest. It's May. Let's look."

The children scuffed through the dead leaves and over to the big Y-shaped log that stretched across the floor of the woods at the base of the hill.

Even though they were close and even though they were looking for the nest of the partridge, still they had difficulty finding it. The buff-colored eggs were not easy to see as they lay hidden in the bottom of a hole filled with dark brown leaves. The log immediately above the nest helped keep the bird's secret too.

It was Jane who finally spied it. On their hands and knees the children gazed into the treasure. There were

nine eggs, and although this may have been a complete clutch, the bird lays up to twelve. A nest of eleven eggs is quite common. Jane and Billy may have surprised the grouse while she was laying her tenth egg, or she may have been incubating.

After this first encounter, the children were very careful not to scare her on other occasions when they passed that way. They saw her on the nest a number of times. Early in June, they found empty shells scattered around the nest and they were happy to learn that the little family had hatched successfully.

The ruffed grouse was declared Pennsylvania's official state bird by an Act of the General Assembly, approved June 22, 1931. The choice was a popular one for the ruffed grouse is typically Pennsylvanian, a native of our woodlands.

The first time Billy and Jane ever heard a male grouse drumming in the spring, they thought it was an old motor gathering momentum. Indeed, Billy made the remark to his father that someone seemed to be having trouble starting his car.

Motion pictures of a grouse drumming have settled an old argument . . . How does he do it? The answer is that the muffled beats that we hear are caused by the wings beating the air, not by the wings beating his body as was formerly thought.

The drumming is believed to serve two purposes . . . a challenge to other males and an announcement to females of his presence.

The female does all the incubating and the little grouse leave the nest as soon as they are dry. The female assumes full charge of the family.

Buy Another Dog?

By N. R. CASILLO

IT HAPPENED the other day. Something that I knew was inevitable and for which I thought I was adequately prepared, struck and left me crushed. Our dog Snappy passed on. And I use the plural possessive for in many ways he was closer to my wife than he was to me.

The void caused by the loss of an old dog pal can never be filled. Time, it is true, will eventually erase the poignant grief and sorrow involved, but it will be weeks and probably months before that heavy tug at your heart will lighten.

Since Snappy was mercifully put to sleep, coincidentally or otherwise, I encountered and read more articles written by those who had recently suffered similar bereavements, than I had previously seen in all my life.

Most of the articles eulogized canine pals or reminisced about former hunts, companionship and the hundred and one things with which a dog becomes associated in the activities of a dog loving family. All of them hit a harmonious chord so far as I was concerned, and to a remarkable degree helped to assuage the grief whose intensity was beyond understanding.

Indeed, regardless of the particular slant pursued by the authors of the various articles they were all helpful and comforting for the simple reason that they dealt with an experience common to all concerned.

Not so long ago a friend declared that he wouldn't own a dog because one becomes so attached to it. He held the view of one more gifted in the handling of prose than was my friend, when he, after the loss of his dog, warned, "Never give your heart to a dog"; an admonition at which all dog owners who have experienced the devotion that only a dog can give, will scoff.

Here in our county a year or so ago, a recluse living at the edge of town committed suicide. A simple note found by the authorities declared, "I cannot go on without my

dog." The dog, an ancient coonhound, had died a couple of days before. Examples of such devotion are not as rare as one may think, especially if the man is old and friendless and a little "tetched." The italicized portion was appended by a hunting pal of mine shortly after we read about the tragic incident.

A plaint all too frequently voiced by those contemplating a purchase for the first time is

that a dog has such a short life. One day while visiting a kennel, a prospective buyer viewing a magnificent Irish setter in a nearby run made that complaint to the kennel keeper. The latter's reply was one that I shall never forget. "Why, that's the reason for their intense devotion. They don't have as much time to spread it."

Buy another dog?

Well, what do you think?



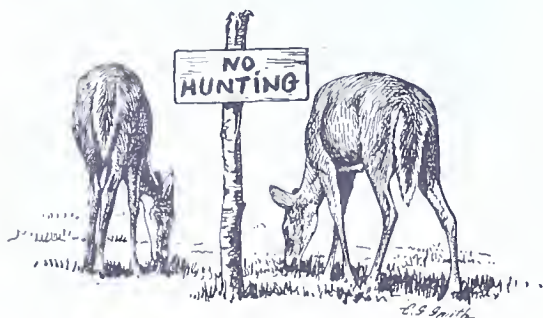
SNAPPY



I have had several beaver dams to dig or blast out because they were flooding roads or fields, but never have I had one like the dam I got in February. Instead of blocking up against a bridge or culvert, the beavers had blocked up the stream under the bridge. It was about in the middle and there was no chance of using dynamite since the blast would have wrecked the bridge. The water was too deep to wade in and there was no room to work on the dam since the bridge was low. The water was even with the bridge stringers on the upper side and it was flooding the road in high water. I used hooks and long poles to remove some of the beaver cuttings and sticks, lowering the water enough to dry up the road, but our only real hope is that the beavers were caught in trapping season and spring floods will take out the balance of the dam. If this doesn't work, we may have to remove the bridge planking to clear the stream channel.—Game Protector Clyde Decker, Philipsburg.

The toad's tongue is attached in front, not at the rear of the mouth. This allows it to be flipped out from back of the toad's mouth and as quickly flipped back to the opening of the throat.

A farmer reported to me recently that two days following the close of the last deer season, he counted 23 deer grazing on his wheat. Unfortunately, this farm and the adjacent woodland was posted against hunting. Damage from deer, however, is not restricted to posted lands since more than a few have mentioned the presence of deer on wheat fields. Deer seem to be more readily observed than small game.—Game Protector Clarence Walker, Beavertown.



We have a number of game feeding stations located in my district and some of the feeders are located in quite remote areas. One of these is located on State Game Lands 93 and when the road gets in bad condition due to winter snows, it means lugging the feed a distance of two miles. This particular feeder holds about 30 bushels of grain, but we have a very large flock of turkeys working on the feeder and it takes a considerable amount of feed to keep them going.

During the first week of February I observed the feed was getting low and since we couldn't get a vehicle closer to it than two miles, I sent out a little S.O.S. What a response! The Stump Creek Rod and Gun Club arrived, headed by the Secretary and the Treasurer, and there were two men for every bag of corn. One trip was all that was necessary to fill the feeder. The sportsmen were happy and so were the turkeys. The end of a perfect day!—Game Protector Claude Kelsey, Troutville.

Early in March I was a guest at an inn on the Lincoln Highway, one mile east of Caledonia State Park. There I saw an amazing thing. Starlings accumulated on a golf course nearby and for at least an hour they arrived by the thousands, arranging themselves in a huge semi-circle so that they faced about 20 of their kind in a separate group. To me it looked like a crowded courtroom with the jury sitting to reach a verdict. After much chattering, a decision was evidently reached, following which the 20 or so birds rose as one, followed by the thousands of "courtroom" starlings. The huge flock blackened the trees in which they alighted by the side of the highway and in flying over the Inn, they sounded like a terrific rain storm.—Charles Kistler, Harrisburg office.

While driving between my home and Mt. Pleasant in December with my wife, we passed an opossum lying on the road which my wife thought was still alive. I went back to investigate and was surprised to note it had young in the pouch. The little 'possums were about the size of crickets. This may not be unusual, but it was the only opossum I have ever seen with very small young in December.—Game Protector Carl Jarrett, New Stanton.

On January 23 while checking muskrat trappers in the vicinity of Deer Lake, I was surprised to see a large bullfrog sunning himself along the bank of a small stream which flowed into the lake. After a cold, wet night the weather had turned unusually warm and the sun rays had evidently penetrated some hidden crevice in the bank and lured him from his winter quarters. In spite of the sun's warmth, the surrounding marsh was still frozen and he was probably pondering this unusual situation. He made no move to escape as I walked quite close to him. He squatted there, blinking in the sunlight and I was amused by his expression of solemn thought, as though he might be wondering what he had done to merit such unseasonable treatment from Mother Nature.—Game Protector T. W. Meehan, Uniontown.

Mr. Charles Lichty of Rockwood told me of an unusual experience he had last deer season. Early one morning, accompanied by his son, he drove to Glenco to hunt in the vicinity of State Game Lands No. 82. A short time after leaving their car, they became separated and very soon Mr. Lichty had killed a nice eight-point buck. After cleaning his deer and dragging it back to the car, he decided to hunt up his son, thinking he might stir up a deer so that his son could get some shooting. He had gone only a short distance from the car when he routed a big buck. After the deer had made a few jumps, the man could see that it was badly wounded. Since the deer was going in the direction of his son, Mr. Lichty started to run after it to keep it moving that way. The deer ran only a hundred yards or so until it fell and rolled into some greenbrier and grapevines. When Mr. Lichty came up to it, the deer was on its feet again and, lowering its head, started toward him. Quickly the man moved back, and the deer then started off in its original direction. Mr. Lichty resumed the chase, but after a short distance, the deer was down again.

When Lichty approached the second time, the deer got to its feet, lowered its head, and started for him again. This time the man didn't move fast enough. He threw his hands up for protection and one point of an antler entered the palm, going through the flesh and raising the skin on the back of the hand. The deer fell again and Mr. Lichty managed to get away from it. Next, the man located his son and brought him back to where the deer had gone down. It had moved several hundred yards, but they were able to trail it and the son finally killed it. The big buck weighed approximately 175 pounds and had a 19 point rack.

Mr. Lichty's hand has healed, but there is still a scar to remind him of one day's deer hunting.—Game Protector L. B. Welch, Confluence.





A mother raccoon decided to make her winter headquarters in one of the local churches. Having located an opening in the roof eaves, she decided to occupy the second story and moved in last fall with the entire family. The minister, however, has served notice that they will be evicted this spring.—Game Protector Mark Motter, Harrisburg.

Several years ago I placed a bird house on a tree near the cabin on State Game Lands No. 110, expecting to attract a family of blue-birds. This winter, while doing some cleaning up after an ice storm, one of the men scraped the house with a branch. To our surprise, six flying squirrels glided from the box onto the trees close by.—Game Protector Elmer Turner, Centerport.

Not long ago I received a report that there was a young lad of ten living within my district who is a victim of rheumatic fever. The only kind of meat the boy could or would eat was venison. His doctor expressed his desire to let the boy have all the venison he could eat. Shortly after I received this plea for help, I had a young deer killed on the highway. It was immediately butchered and I gave a portion of it to this little boy. Now, if all the game that is wasted in Pennsylvania were put to as good a use, I think everyone would benefit. The fact that the family of this little boy came and asked the Commission for the meat instead of taking the law into their own hands and killing a deer out of season indicates that the Commission's fairness is known.—Game Protector Dean Lesnett, Huntingdon.

I have a cottage on the Logan State Forest in Huntingdon County. In spending considerable time at the cottage last summer, we were having trouble with wild animals carrying food away. About the middle of June my mother and I were awakened one night by a strange noise. I listened about a half hour but all was quiet again and sleep overtook me. About three a.m. my mother called me again and this time I heard something crying in the night. There would be



some crying for two or three minutes and then silence for about 20 minutes. The crying was not unlike the noise made by a pileated woodpecker. The location of the sounds could not be determined; they sometimes sounded quite muffled. I spent the time until daylight looking and listening. At dawn, my mother cried that "it" was on the daybed on the back porch. I peeped through a window and saw—a gray fox. It had the mattress on the bed torn to shreds. The only gun about the place was a .22 rifle. It was laying on the daybed on the back porch and the fox had included it in its nest. I slipped out through the front door, took a stout walking stick, walked around back. When the fox saw me, it just sat up. I moved to a good position and killed it with one blow on the head. At no time did the animal make any attempt to escape. A post-mortem examination showed it to be an average size female that had been eating nothing but sweet cherries.—Don Gramly, Altoona.

During the past beaver season, while assisting Game Protector Jim Latimer, we checked a beaver dam on the Red Rock Mountain. We checked 21 traps which circled a large beaver house. Six traps had been removed the day before, making a total of 27 traps. We were well assured that Mr. Beaver and his family would not leave that house to run such a gauntlet of steel, poles and wire that made him afraid of anything that looked strange.—Game Protector Glenn Kitchen, Weatherly.

Two Boy Scouts brought a dead rabbit to me in February and told me the following story: They had caught the rabbit in one of the box traps they had set on the Alliance College grounds. After removing the bunny from the trap, they put it in a cloth bag and left the bag on the bank of a small creek while they checked another trap. The rabbit struggled in the bag and went over the bank into the water. The boys discovered its plight, removed the bag from the creek and the rabbit from the bag, and proceeded to administer artificial respiration. After working some time and obtaining no results, they brought the rabbit to me, wondering if I could revive him so they could collect their agent's fee. An examination found the rabbit to be beyond help. It would have been interesting to watch the boys administer artificial respiration to a rabbit.—Game Protector Elmer Simpson, Cambridge Springs.

Throughout eastern Susquehanna and northern Wayne counties, there is again a serious outbreak of rabies in the fox population. Quite a number of people have been attacked and bitten while working in and around homes and buildings. In several cases farmers lost a number of heads of cattle and in several instances, dogs that have come in contact with diseased foxes have had to be destroyed. For a time most of the animals infected seemed to be gray foxes, but in February about an equal number of red foxes have become diseased. This is a very serious condition in this area and where or when it will stop, no one knows.—Game Protector Howard Hoffman, Susquehanna.



In looking over some of the daily notes jotted down in my Field Diary, I find the following: On February 21 I received a call from a woman who lives along the Susquehanna River, telling me of a Great Blue Heron that was found frozen fast in the shore ice. The bird was still very much alive when I arrived, although its feet were badly frozen. I kept the bird at home in the cellar, but on the second day it died. On the 25th of February I saw four flickers and two Evening Grosbeaks along the river and on the 28th a flock of about 30 robins and meadowlarks.—Game Protector Al Kriefski, Lewisburg.

While checking beaver dams in the Parker Run Section of McKean County on February 17, I came across the tracks of a pair of otters. As far as I have been able to determine, this is the first report of otter in this section for many years. I tracked this pair in and out of beaver dams for several miles until they finally decided to take off across country.—Game Protector Norm Erickson, Emporium.

At birth a black bear cub weighs from 9 to 12 ounces which is about 1/200 to 1/250 of its mother's weight. It is about 8 inches long, blind, and covered with a dark hair so thin that it is practically naked.

The ear corn distributed by the Commission last winter is paying huge dividends in the form of wild turkeys. Turkeys in the mountains, turkeys in the valleys, turkeys everywhere; in fact, Clinton County is practically overrun with turkeys. Seeing these magnificent birds in such abundance is one of the greatest thrills of my entire 30 years as a Game Protector and as long as I have an ear of corn left, I'll put it to 'em.—Game Protector Miles Reeder, Lock Haven.

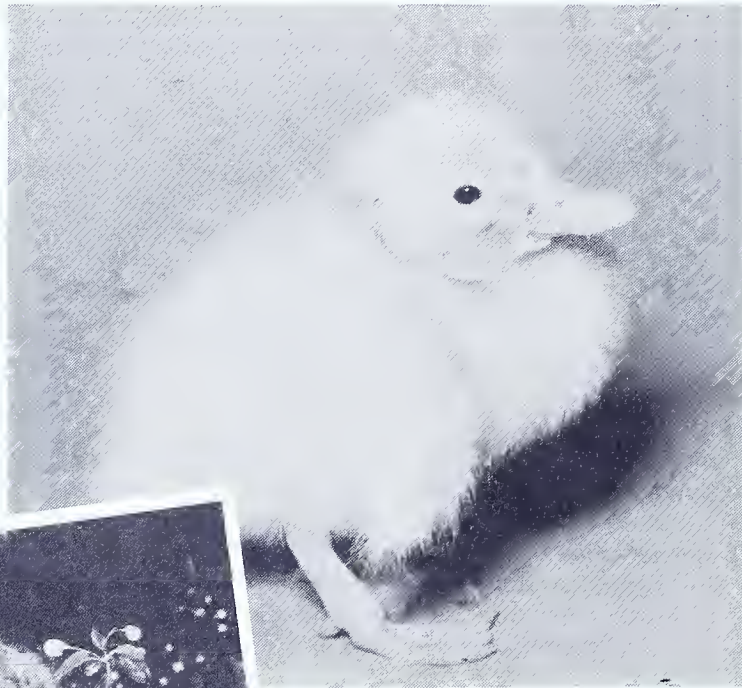




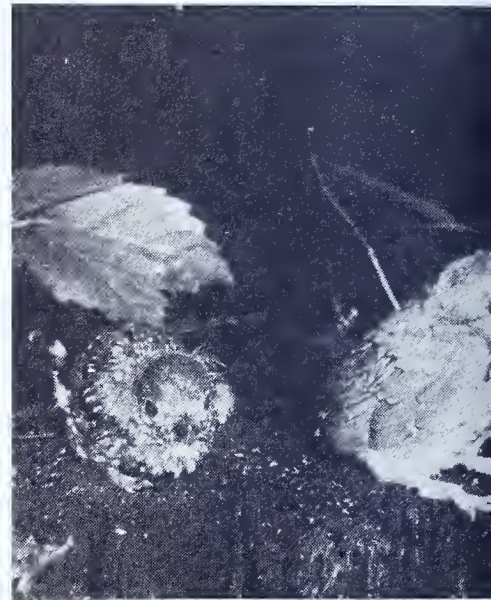
WOOD PEWEES
 "Robber!" "Thief!" "Kill the ump!"



BY HAL



BARNYARD DUCK
 "Gosh, Mom, I feel awful this morning. Do I hafta go to school? Huh, Mom?"



WOOD THRUSHES
 "Honest, Butch, I'd like to go along watch my kid brother today."



LONG-EARED OWLS
 "If any more kids show up here, we gotta make more knotholes in this fence."



KINGFISHERS
 "Look, fellas, here comes the clowns and elephants."

TREE
 "Hey, M
 eat? We'r

Small Talk

HARRISON



OWS
n do we
d!"



gotta



GREAT-HORNED OWL
"Honest. Cross our hearts, Mister. We didn't break your window. Honest, Mister, we didn't."



SCREECH OWL
"How do you do, Mr. Goldrocks. I am Elizabeth Anne, and my mamma said I was to be nice to you because you're awful rich."



GREEN HERONS
"I say it's a P-38."
"Aw, you're nuts! It's a P-51."
"OK, wise guys. If you wanta know, it's a Corsair."



CROWS
"School days, school days,
Dear old golden rule days."

Early in 1947 the Game Commission inaugurated a program aimed at providing, as well as improving, nesting facilities for wood ducks. The little "woody," as they are known to most sportsmen, makes her nest in hollow cavities of trees, sometimes at a height of thirty to forty feet. Due to lumbering, storms, stream bank erosion, etc., these natural nesting sites have gradually become less abundant, hence this present effort to increase nesting sites throughout those areas in Pennsylvania most adaptable.

In Division "C," comprising Northumberland, Montour, Snyder, Sullivan, Union, Lycoming, Tioga, Bradford, and Columbia Counties, a concerted effort is being made to definitely increase the wood duck population by erecting 250 nesting boxes to augment their natural nesting sites. Proof of the success of these efforts was shown this past nesting season (1949), when records show almost a fifty percent occupancy.

Wishing to learn some of the habits of the wood duck while occupying one of these nesting boxes, the writer was instructed by the Supervisor to make an effort to secure moving pictures.

On May 4 I proceeded to Game Protector Case's headquarters at Troy and was accompanied by him to a beaver dam pond to check several wood duck boxes which he knew to be occupied. From these, one was chosen as having the best photographic possibilities. Game Protector Case, who had had extensive experience with chickens prior to working for the Game Commission, took one of the 12 eggs from the box, broke it, and from the development of the embryo figured the eggs would be hatched in about two weeks, or about the 18th of May.

Then on May 12th I returned to the site with Case and built a blind of hemlock boughs across the small stream from the box at a distance of about thirty-three feet. This was done so as to allow the hen to become accustomed to seeing it prior to my going there.

On May 17th I occupied the blind and set up my equipment in the hope of obtaining pictures. Thru sun and rain from May 17 to May 21 I sat in this blind during all daylight hours that were suitable to the taking of color pictures. My presence was soon noted by the nesting hen, but she was too busy with work at hand to be bothered by me. In going to and from the blind and while sitting there, I tried not to make any quick movements, or unnecessary disturbances.

Each day I ran the camera just a little and this whirring noise would cause her to move her head nearer the opening in the box, but as soon as it stopped, she would settle back and with the exception of the top of her

WOODY'S UNLIMITED

By John S. Shuler, Conservation Education Asst.—"C"



PGC Photo by Cady

This is one conservation project where sportsmen's organizations could play a very helpful and beneficial part by erecting wood duck boxes in their local areas where they know wood ducks breed.

head and eye, would disappear from sight. Various times as I observed her, she would seem to be very busy and this I believed was due to her turning her eggs. At other times she would push her bill and part of her head out of the hole as if to make sure all was well without, and one day when a pair of Woodys floated down the little stream that separated me from the box, she kept an eye on them, but otherwise did not appear excited nor interested. Only twice in the four days I sat there did I see her leave the box, but on neither occasion had she returned by the time light conditions forced me to leave.

When I went to my blind Saturday morning, May 21st, everything appeared same as before; in fact I thought she was less active in the box than usual. About 11 A. M. I noticed her moving about, but thought this not unusual until I saw a little yellow puff of down jump up in front of the opening. That was the first definite sign that the young had hatched. From then on things happened fast. She became very excited, jumping up on the edge of the hole and apparently looking over the terrain beneath for a possible landing site, as the box was about twelve feet from the ground. This she did several times and each time she went back into the box I could see several little ones jumping up in front of the hole. Then finally a little one appeared on the edge of the hole and the mother hen pushed her out and it landed on the soft mud below. Immediately

the hen followed and upon hitting the ground started calling to the others still in the box. In rapid succession the others appeared in the hole and fluttered to the ground. I counted nine. Knowing there were eleven eggs, I waited just a little to see if there were any more, but there wasn't.

It was my belief that she would bring her young directly to the water, but instead, and this was probably due to my presence there, she headed over land with them toward the swamp. All this happened with such speed that by the time they had all left the box, I wound my camera, and took it from the tripod and waded the stream, she and her brood were gone and a search by Game Protector Case and myself failed to locate any of them.

A search of the box produced two unhatched eggs which gave her a 9 out of 11 score. One thing we noticed was the lack of eggs shells in the box, or outside, and it is our belief the hen must have eaten them.

In twenty minutes everything for which I had waited four days to happen was over. I was able to get some of this activity on film for others to see and enjoy, but if I had been able to record all that I had witnessed during the time of my observation, it would have been a most interesting tale.

This is one conservation project where sportsmen organizations could play a very helpful and beneficial part by erecting wood duck boxes in their local areas where they know wood ducks breed.



DEATH STALKS THE CARELESS CAMPER

By FRANK J. FLOSS



THE flickering campfire light danced back and forth across the smiling faces of Dick, Jim, and Stan, as they sat around it making plans to go fishing on the 'morrow, in the lake at the foot of the mountain. Plans complete, Dick arose, suppressed a yawn and said, "Before I turn in, I think I'll take a walk over to the edge of the cliff, and see what the lake looks like by moonlight. It should be a pretty sight!" Jim and Stan, let him go without replying. Half-asleep they stared at the fire as it slowly burned down to dull red embers.

Suddenly, the silent night air was split by a spine-tingling scream! Jim and Stan, came to their feet in one bound, wide awake and, casting scared looks at each other, muttered at the same time, "Dick, the cliff?" They dived into their tent, grabbed their flashlight, and set out for the cliff on the dead run, yelling Dick's name. On reaching the cliff edge, they played their light beams on the rocks 200 feet below, where they merged with the lake. With a low anguished moan, Stan muttered, "Jim! Look! Right at the edge of the water, Dick's body. He took the wrong trail and fell over the cliff."

MORAL: When camping in unfamiliar territory, never travel unknown trails at night. Make all exploring trips by daylight first, so that you will know where they lead to.

* * *

Diana and her brother, Jack, after admiring the large rose-like flowers of the rhododendron growing on the mountain slope above their campsite, decided to spend the afternoon collecting a few specimens for their biology class at school. On reaching the slope they found it fairly steep. The only way they could reach the flowers, was by reaching above their heads, getting a hand hold, then pulling themselves up to

where they could get another hold. Jack tried it first, he reached up, clasped his fingers around the roots of a tree and started to pull himself up. However, at that instant, Jack gave a yell, and let go quickly, as the ominous Bzzzzz of a rattlesnake sounded above him. Jack looked at the two small holes in the back of his smarting hand, and his face turned white. Diana, realizing what had happened started screaming at the top of her voice for her father.

MORAL: Never put your hands anywhere when camping, unless you can see where you are putting them. Avoid putting them in blind spots. Contrary to popular belief rattlesnakes do not lie and bask in the direct sunlight where they are easy to see. They seek warm shaded spots to lie in such as depressions in rocky ledges, the shaded side of log, under tree roots, the shaded side of a large rock, etc. Play safe—carry a snake-bite kit with you when camping.

* * *

Big Jim Turner returned from fishing with a fine mess of trout from a nearby stream. He looked around the camp, but no one was in sight. "Oh well," he thought to himself, "I'll fry myself a couple of these fish for lunch." He cleaned two of the largest, put them in a skillet and set them on the gasoline stove. He turned on the gas, struck a match and applied it to the burner, but it would not light. "Darn it," he exclaimed, "It's out of gas!" He then took off the tank, turned it on end, and started to pour gas in it from a gallon jug. The gas spilled all over the tank. Mad anyway he let it spill, until the tank was full. Then putting it back in the stove, he pumped it full of air, opened the valve, and lit another match. This time tank, stove, and everything caught on fire, he pulled off his hat and tried to beat out the flames. While so engrossed the heat from the flames exploded the tank, and covered him with burning gas. They found his charred body that evening 50 yards from the tent.

MORAL: Never fill a gas stove tank without a funnel. And if any gas spills on the tank wipe it off before you light the stove. If a tank does catch on fire either smother the flames with a coat or remove the tank and douse it in a bucket of water, do not try to beat out the flames.

* * *

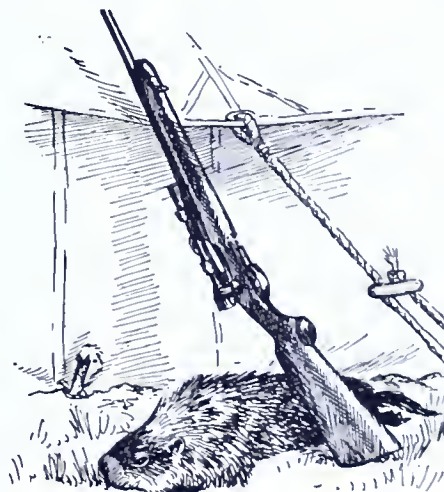
All morning from their campsite Pete, and Henry, watched a porcupine as it climbed about a tree feeding on its bark, on a ledge some 500 feet above their camp. Pete said to Henry, "Let's get our cameras and do a little mountain climbing, see if we can

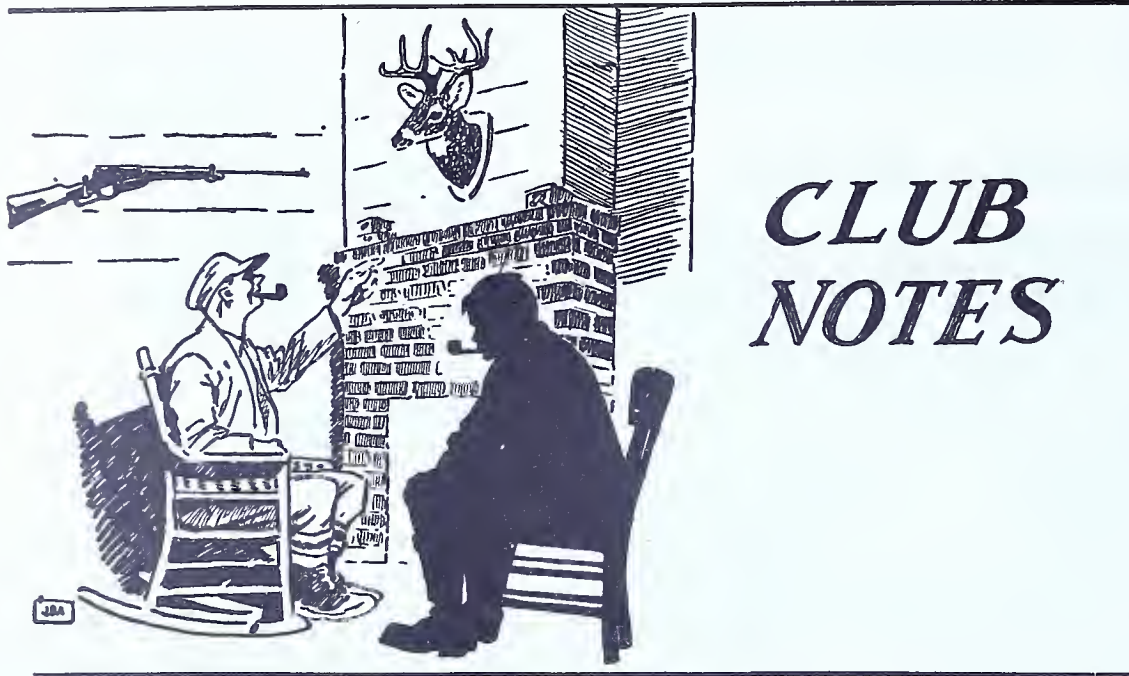
get that porky's picture." "Ok," Henry agreed, "Let's go." The way up to the ledge was very steep, so Henry let Pete get a little start before following him. He waited until Pete was about 50 feet above him, then he followed. It was tough going. They used boulders, rotten logs, brush and branches, to help pull themselves up. About halfway to the ledge, Pete looked down at Henry directly below him and said between gulps of air, "Let's rest a minute!" But at that moment the boulder he was hanging onto started to move. He scrambled out of its way. But Henry was not so lucky—the boulder hit him squarely and knocked him end over end down the mountainside, to land in a broken heap, on the flat below.

MORAL: Never climb directly below another climber. Always angle upwards using boulders, logs, etc. against which to lean your weight when angling.

Chuck and Mart, returning from a groundhog hunt, leaned their rifles against their tent, and went about the business of cleaning the groundhogs they had shot for their evening meal. The day was hot so they were in a hurry to get their groundhogs skinned, and into the protection of a lidded pot, before the blow-flies had a chance to go to work on their meat and spoil it. Chuck laid his groundhog down on a log on the shaded side of the tent and started to split the skin on its under-side with his hunting knife. Just then Mart came around the end of the tent and stumbled over one of the tent ropes, the tent shook violently, the rifles crashed to the ground, and one of them went off with a loud bang. With a yell, Chuck dropped his knife and grabbed his leg, where a round hole appeared oozing blood.

MORAL: Never set a loaded gun down around camp.





Hellertown Sportsmen's Association

On February 24 the Hellertown Sportsmen's Association formally accepted the Kern Wildlife Collection from Dr. Thomas Kern and Miss Carrie Kern, of Bethlehem, brother and sister of the original owner. Dr. Samuel Kern, former druggist of Slatington, traveled throughout the United States and Canada to amass this collection under both state and Federal permits. The collection consists of song, shore, predacious, and game birds as well as specimens of many wild animals. Despite many offers from museums and collectors, the collection was donated to the sportsmen's organization and a bronze plaque of appreciation was unveiled at the ceremonies in February. Trustee H. G. C. Hoffert of Hellertown has announced that this collection is open for study and public viewing to any group of Boy Scouts, Girl Scouts, and students, as well as other sportsmen's clubs. Arrangements can be made through Mr. Heffert.

Cresson Community Sportsmen's Association

The Cresson Community Sportsmen's Association of Cresson recently concluded an outstanding year of activity and accomplishment, according to J. H. Connell, Publicity Chairman. The club house, known as the old Cressoreta Tavern, was rebuilt and made available for public use; a twelve acre dam was constructed and the resulting pond stocked with bass; a large swimming pool has been excavated and will be completed this year; and a public picnic ground has been landscaped. A list of projects for 1950 includes rabbit trapping, construction of additional fireplaces and completion of picnic grounds, construction of a skeet range, and other improvements to be made on the 65 acre tract which comprises the club grounds. During the past year the club also sponsored a Boy Scout Troop and the program is to be enlarged in 1950. The organization also has an active Farmer-Hunter Relations Committee working on the all important problem of more open farmland for hunting. The Association is currently headed by Paul Briel, president; Stanley Wilson, vice-president; and Gerald Plummer, secretary-treasurer.

Blawnox Sportsmen Club

In late January, officers and members of the Blawnox Sportsmen Club held a venison dinner in honor of twelve members who had been active in the club for ten years or more and who were sixty-five years of age or older. President W. J. Troeger presented each of these members with a Life Membership card. They are to be exempt for all dues and have all the privileges of the club rooms and camp in the mountains on the Allegheny River. It was strictly an all-male affair but, according to A. J. Socher, Chairman of the Fish and Game Committee, the cooks served a real venison dinner with all the trimmings. This club was started in 1936 with 8 members and now boasts of over 700 along with a large women's auxiliary.

Delaware County Field and Stream Association

On April 1 the Delaware County Field and Stream Association held its first Field Day for Junior Members. The junior members were divided into groups of five and given competent instruction at the High Power Rifle Range, Small Bore Range, Pistol Range, Plug Casting, Trap and Skeet Ranges. All of the boys were observed by a panel of judges and points were awarded for sportsmanship, aptitude, and knowledge of the various events. The top ten became eligible to attend the annual outing of the "Brotherhood of the Junglecock" at Thurmont, Maryland this month. All expenses to this outstanding outdoor experience are to be paid by the Association. The organization recently celebrated its 12th anniversary.

Towanda Gun Club

The Towanda Gun Club recently held their 70th Annual Banquet. Featured speaker of the evening was John Schuler, Conservation Education Assistant, from the Commission's Williamsport office.

Northumberland County Federation

More than 200 sportsmen and Game Commission officials paid tribute to Bruce P. Yeager, veteran game protector in charge of Northumberland and Montour counties at a testimonial banquet last February 17. The affair was sponsored by the Northumberland County Federation of Sportsmen's Clubs, embracing units in Mt. Carmel, Northumberland, Sunbury, Shamokin, and Milton. Harry Minnich, of Milton, Federation President, presented Game Protector Yeager with a U. S. Savings Bond in behalf of the entire Federation and Rodman C. Case, of Troy, oldest game protector in the Commonwealth, presented the honored guest with outdoor clothing in behalf of the Commission employees of Yeager's District.



Recently elected officers of the Spring Grove Sportsmen's Club are: First row, left to right, District Game Protector E. E. Geesaman; John Sauter, president; Paul Riley, vice president; and Ray Klinedinst, secretary. Second row, left to right, Dave Hoover, director; Millard Stambaugh, treasurer; and Jay Yost, assistant secretary.



The Personality of Your Dog

By HERBERT KENDRICK

IT TAKES all grades of gun dogs to make up a canine world just as all kinds of people are required to complete the human cycle. Specific tasks are assigned to people best suited to accomplish desired results, and so it is in the dog world. The Alaskan fur trader would be out of business without his "huskies," the small boy must grow up with his spaniel, while the miss loves her Pomeranian, and police authorities require their bloodhounds. Just as the duck hunter needs a retriever, the quail gunner selects a pointer. The pheasant enthusiast relies on pointers, setters, springers, and the season grouse man swears by the setter. The fox, coon and rabbit hunter would be lost indeed without a pack of hounds.

It is not difficult to select the breed of dog best suited to one's needs, however, when we attempt to pick out the animal of our desired breeding that will harmonize with our own individualities, the task becomes more difficult. For instance, we find a youngster who has killed enough grouse to acquire a deep love of the fine sport, then his choice of a grouse dog would be a young setter that could match his speed and endurance in the woods.

A man of sunset years who loves to wander in the woods, reliving memories of other days, synchronizes more perfectly with a slow dog of limited range. Since there are different grades of hunters we may as well expect dogs to come in various classes, and since man is a definite personality it is not absurd to expect your gun dog to have an individual personality.

I have seen dogs so thoroughly trained their field performances were as if the trainer governed them by remote control, and although faultless in the field some of the sublime love of hunting escapes. Such a dog is not allowed to develop his own personality. Wise trainers permit young hopefuls to run wild and free, thus developing range, courage, speed and brains. These youngsters soon reveal their true characteristics to the master, thus enabling him to train each in an individual way. We may outline a perfect set of qualifications the dog must possess before we call him great, and he may be classed as a superlative animal, yet fail to place with other cherished canine companions of lesser virtues.

My Jack was a powerful pointer and he followed the finest rules to the letter, yet he possessed a mean temper, and was a very selfish personality. I loved his speed, nose, endurance and his perfection in game bird handling, but he was not one to deeply love.

Bird hunting to me is not so much a science as it is a traditional part of my very existence, showered with ever green memories, pleasant anticipation, and abundantly endowed with sentiment. Give me a crisp autumn day, a few acres of hardwoods, a twelve double, and a dog that loves the woods as I do, that understands me and possesses a knowledge of grouse seeking, and if he ranges

(Continued on Page 31)

USABLE ACCURACY

By ED SHEARER

NATTY BUMPO, Lew Wetzel, Morgan's Riflemen and all other legendary figures of the long tube can now move over to the deacon's seat. Even the great lead slingers from the vast frontier of Hollywood stand a fair chance of being vindicated. The next time you read of Buckskin Joe levelling off and crackin' a squirrel in the head at 100 yards just assume a bored expression. It's the eye or nothing at that range. If you insist on being a head hunter, you'll have to run the range out at least another hundred yards. The old elusive minute of angle combination of gun and ammo which every shooter dreamed of will only make you a paying customer to day—at least up to three hundred yards. This revolutionary state of affairs has been brought by a bunch of guys who call themselves "The Bench Rest Shooters of America." Who'er they you ask? Well I've heard two versions.

One is that some fugitives from the old long range gang finding game extinct by the discontinuance of the Camp Perry matches, teamed up with a bunch of bored varmint shooters. Said varmintiers being fed up with shooting for heads at a coupla' hundred yards decided to shoot for whiskers only. They fell in with a crowd of wild eyed experimenters and the devil only knows where they'll stop.

The other version runs that a gang from the Pacific Coast, up Seattle way, decided to find out why they were always behind the eight ball. No matter what size group they shot, from somewhere would bob up a better. In fact much better. Being of skeptical mind they decided to find out just how much shoot there was in our modern guns. So they organized what they called an Annual Snipers Congress. They shot the works. Any rifle, any sight any rest and cartridge that was safe. They wanted the dope on just how accurate our best modern rifles could be. The results were illuminating.

Not to be out done by their Pacific coast brethren, an Eastern group headed by the salty Harvey Donaldson of Fultonville, N. Y., put on a series of bench rest matches at the Pine Tree Rifle Range at Johnstown, N. Y. Now everybody is getting into the act. Today there are about one dozen groups spread out over the country who are holding annual matches.

At first groups were running about one inch at 100 yards. Nothing to shout about. Like the measles we've had 'em before. But as time passed and the boys really got warmed up things began to happen. Take a look at this.

This year at the Oil City Bench Rest Matches, Clair Taylor, same address, placed five shots in an .056 inch center to center at 100 yards. This amazing string stands as a world's record. Before this the same shooter had fired five shots in .187 inch center to

(Continued on Page 31)



New Approach to Additional Food and Cover

Early this spring the Game Commission started what might be termed an experiment designed to improve wildlife conditions in the northwestern part of Pennsylvania. If successful, it will prove to be the forerunner of an extensive program that will increase game foods on many forested areas of the Commonwealth at a minimum of cost, compared to importing exotic plant species in an effort to provide wildlife necessities.

Highbush huckleberry plants and others will be transplanted from State Game Lands in northeastern Pennsylvania, where they grow in abundance, to the Allegheny National Forest to improve grouse habitat there. This highbush huckleberry, or blueberry, grows to a height of 6 to 8 feet. It fruits profusely and makes ideal cover conditions. In addition, deer damage to it is negligible. This plant should not be confused with the huckleberry in the western counties which grows to 18" to 20" and is also known as "highbush." In addition to huckleberry this venture will include other food-bearing species, such as mountain ash, grape, whitethorn, thornapple, and others.

Soil acidity in the National Forest is believed to be the same as that where the transplants originally grew, and climatic conditions are known to be comparable. Therefore, it is reasonable to assume that the experiment will prove successful and that grouse and other wildlife will increase through the benefits of improved food and cover conditions.

Pheasants for 1950-51 Release

The Pennsylvania Game Commission has approved bids from commercial breeders who will supply ringneck pheasants for spring and fall release in the Keystone State. These birds are in addition to the 60,000 it will be possible to raise on Pennsylvania Game Farms. The proportion, males to females, will run about 50-50, as it does at the Game Farms.

These bids call for the purchase of 36,110 pheasants for the fall, 1950, and 23,730 pheasants for spring, 1951. The introduction of ringnecks has resulted in a major sport for Pennsylvania nimrods. The purchased birds are considered necessary if the Commonwealth's coverts are to be adequately stocked.

Rabbit Farm Program Progresses

The Game Commission will pay from the Game Fund for 60,528 Missouri cottontail rabbits delivered alive and released in Pennsylvania during the 1949-50 winter. These rabbits were transported from the west by truck in an attempt to reduce to a minimum the time between catching and releasing dates. Since last winter was mild, it is anticipated that survival will be considerably higher than has been the case when imported bunnies were released on snow during normally cold winters.

During the past winter, Pennsylvania's new rabbit farm program progressed nicely. Since last fall, when the plan was adopted by the Game Commission, twenty-two of these natural propagation areas have been established. Counties wherein the project will be tried out for later state-wide adoption are: Armstrong, Blair, Clarion, Dauphin, Jefferson, Lycoming, Montgomery, and Susquehanna.

A large number of inquiries on the new rabbit program have been received and many farms have been offered as propagation units, testifying to the wide interest aroused.

In many places the Game Commission is selecting areas that have been closed to hunting and, with the sanction of the landowners, will turn them into assets as cottontail producers for open hunting territory. Farms and estates already offered as rabbit propagation areas have fair to excellent environment. The acceptance of such rabbit areas will be only the beginning, however. Proper habitat management will be practiced on them to bring about the greatest possible production. It is recognized that rabbit populations will be in direct ratio to the habitat present.

In areas where the foundation stock is insufficient, native Pennsylvania rabbits will be released. In the words of one sportsman, "You can't beat Pennsylvania cottontails for restocking in Pennsylvania."

When this propagation plan has proved itself the goal will be one such farm in every township of the Commonwealth. Then, it is anticipated, the surplus trapped from rabbit farms will provide superior game animals for restocking in the Commonwealth.

Bill Threatens Pittman-Robertson Program

A bill, which would wipe out the Federal Aid in Wildlife Restoration program by depriving it of funds, has been introduced into the House by Congressman Harold D. Donohue of Massachusetts, the Wildlife Management Institute reports.

This bill, H. R. 7569, which is now in the House Ways and Means Committee, would repeal excise taxes on firearms and ammunition that, under the Pittman-Robertson Act, are allocated back to the states for wildlife restoration work.

Under this Act, all states have been able to expand game restoration programs far beyond their unassisted capabilities. In many states, sportsmen now are able to enjoy hunting in areas which, without the Federal Aid in Wildlife Restoration Act, today would be devoid of wildlife. In many cases, mere remnants of past game stocks have been rebuilt to the point where they produce harvestable annual surpluses. Notable is the spectacular restoration of the pronghorn antelope in the West, the enlargement of the natural range of the bighorn sheep, and the restoration of turkey hunting in states where America's largest game bird had long been absent from the game lists. In the United States there is no useful species which has not benefited directly from the Federal Aid program. Several have been restored to plenty from a status of near-extirmination.

If the Donohue Bill were to become law, all states would have to curtail their activities for the benefit of the sportsman. Many excellent, established projects, which now are dependent upon revenue from the Pittman-Robertson Act, soon would be abandoned, or the cost of hunting licenses would have to be multiplied to meet the demand. Plans for future expansion of wildlife restoration work, now in blueprint form, would have to be junked.

The Pittman-Robertson Act is one of the most valuable and most popular tax bills in the Federal statute books. Organized sportsmen are firmly behind it, as was evident in the outburst of sentiment which followed the President's veto of its companion, the Dingell Federal Aid to State Fisheries Bill, last fall.

Better Farming Means More Wildlife

That well-managed farms mean more farm wildlife has been emphasized by wildlife technicians for many years. Proof of this statement is seen in the results of an Ohio Pittman-Robertson Project, the Wildlife Management Institute reports.

The Oldaker Wildlife Restoration Unit is a 140-acre farm purchased by the state as a demonstration area. On it, the most modern farm management practices—contour farming, crop rotations, liming, fertilizing, and border plantings—are used. Woodlands were fenced against grazing, multiflora rose hedges replaced many wire fences, and former waste areas were planted with lespedeza. Wildlife populations, almost nonexistent before, jumped the first year to three cottontails an acre, five squirrels per acre of woods, and quail to one bird per five acres. Muskrats migrated into the three-acre farm pond. Last summer small animal populations doubled. The quail density zoomed to a bird to each two acres, pheasants and woodcock multiplied, wood ducks and coots nested on the pond, and six muskrat houses were built.

Report on 1948-49 Fur Catch Issued by FWS

Fur takes are decreasing while the populations of wild fur-animals are increasing, according to Frank G. Ashbrook, in charge of Wild Fur-Animal Investigations for the U. S. Fish and Wildlife Service, in his annual report on the fur catch in the United States and Alaska. The report, issued as Wildlife Leaflet 315, is a free publication of the Fish and Wildlife Service.

"Warehouses are bulging with raccoon, opossum, skunk, fox and coyote furs," Ashbrook says in his introduction. "These are the 'unwanted furs'—according to the trade designation. A considerable number of raw furs are only worth 25 cents or less per pelt on the market, and, in some states, local raw fur receiving houses are not buying certain species of long-haired furs.

"Some ideas advanced to build up the market for these long-haired furs including shearing, clipping and dyeing to make a 'new and exotic' product. Already, stylists have shown crimson and green fur coats. Experiments in the production of fancy leathers from unwanted skins also continues apace. Suede shoes, gloves, 'chamois,' billfolds, and unique bookbindings are only a few of the products manufacturers hope to make out of such skins as raccoon, opossum and coyote."

Some operators of warehouses that are full of cheap raccoon skins have recently expressed the hope that "Dan'l Boone" caps of raccoon fur—with tails flying out behind—would become a style-hit again with teenagers, skiers and others, says Ashbrook. A revival of the old "Joe College" raccoon skin coats, though, is not looked for. The labor involved in making up a coat runs into too much expense. But the Daniel Boone cap, say the fur operators, would make a wonderful small home industry for many towns.

PENNSYLVANIA GAME COMMISSION Legal Big Game Kill

(Based on Tabulation of Game-Kill Reports)

Counties	Deer—Legal Antlered		Deer—Legal Antlerless		Bears	
	1948	1949	1948	1949	1948	1949
Adams	96	122		234	..	..
Allegheny	36	34		43	..	..
Armstrong	316	326		425	..	..
Beaver	63	69		56	..	..
Bedford	541	677		Closed	..	..
Berks	195	275		847	..	..
Blair	439	646		1,109	..	..
Bradford	760	1,065		1,845	11	2
Bucks	72	82		89	..	..
Butler	261	343		494	..	..
Cambria	368	540		1,121	..	..
Cameron	994	1,253		2,331	58	58
Carbon	295	404		628	1	1
Centre	1,529	1,798		3,714	9	11
Chester	43	52		41	..	..
Clarion	357	493		631	2	1
Clearfield	1,372	1,602		Closed	5	4
Clinton	1,308	1,645		2,434	45	54
Columbia	274	389		669	1	..
Crawford	348	487		715	..	..
Cumberland	165	219		420	..	..
Dauphin	305	377		714	..	..
Delaware	9	8		7	..	..
Elk	1,866	2,675		9,804	17	31
Erie	246	319		361	..	..
Fayette	356	439		743	..	..
Forest	998	1,598		Closed	23	13
Franklin	236	349		Closed	..	..
Fulton	231	349		Closed	..	..
Greene	20	45		Closed	..	..
Huntingdon	752	1,119		1,742	..	1
Indiana	413	572		754	..	..
Jefferson	646	706		1,774	12	14
Juniata	197	348		463	..	..
Lackawanna	187	310		513	2	9
Lancaster	33	38		32	..	..
Lawrence	53	68		53	..	..
Lebanon	115	185		301	..	..
Lehigh	36	73		92	..	..
Luzerne	770	1,083		2,414	..	4
Lycoming	1,615	2,008		3,239	32	38
McKean	1,982	3,167		8,611	21	29
Mercer	101	174		222	..	..
Mifflin	274	428		603	2	..
Monroe	648	970		1,890	13	8
Montgomery	19	25		30	..	..
Montour	45	59		121	..	..
Northampton	72	101		163	..	..
Northumberland	152	198		339	..	..
Perry	320	387		Closed	..	..
Philadelphia .....	....	....		....	..	..
Pike	959	1,091		2,270	40	21
Potter	2,449	3,664		7,436	34	26
Schuylkill	438	692		1,217	..	..
Snyder	111	175		189	2	1
Somerset	791	1,101		2,129	..	..
Sullivan	837	1,087		2,839	7	15
Susquehanna	421	629		783	..	..
Tioga	1,367	1,957		2,684	27	29
Union	251	310		435	8	8
Venango	577	849		1,952	2	1
Warren	1,271	2,104		6,147	10	14
Washington	13	17		19	..	..
Wayne	608	842		998	3	9
Westmoreland	584	779		1,167	..	..
Wyoming	313	463		835	1	8
York	56	81		32	..	..
County Unknown	33	62		158	..	1
Total	33,608	46,602		84,121	388	411

CLOSED

Waterfowl Populations Decline, FWS Director Says

While millions of ducks and geese remained in the U. S. last fall because of mild weather—instead of flying on to Mexico—and many sportsmen therefore were under the impression that waterfowl populations had increased, the sad news is that continent-wide studies indicate waterfowl numbers have declined, Albert M. Day, Director of the U. S. Fish and Wildlife Service, said in San Francisco at the 15th North American Wildlife Conference.

"It looks now as though instead of gaining ground last year, waterfowl populations lost some of the previous years' gains. We not only took the harvestable crop, but also cut into the 'capital stock' of this year's breeders," stated Day. "I fear that the final totals of the recent inventory will show a population decline."

Service Director Day also expressed concern over the accelerated pace which agricultural drainage has assumed in recent years. As a result of government subsidies and technical advice, private landowners are destroying essential breeding and wintering habitats much faster than conservation agencies can rebuild and preserve them.

Since 1942, almost 6,000,000 acres of marshland have been drained, while only about 4,500,000 acres of waterfowl habitat have been developed by state and Federal conservation agencies during the last 20 years.

"To me," said Mr. Day, "it seems more than mere coincidence that the waterfowl populations have been so slow in recovering during the same period that so much of their essential habitat has disappeared as a result of this drainage program."

"The ultimate purpose of this agricultural drainage program is to put more lands under cultivation. Why wouldn't it be sounder public policy for the Government to pay the farmers for *not* draining their marshes? Payments to landowners to encourage the production of ducks and geese and muskrats—which are always in short supply—might well lead to greater national benefits than to continue to deplete our soils to raise potatoes and cereals and eggs, which are hauled and stored in already bulging storage space."

Mr. Day also suggested that it might be better to leave the spring and summer runoff on the land instead of hurrying it through drain tiles to networks of ditches, then into straightened streams that rush with ever-increasing speed into swollen rivers that are damned for flood control and leveed higher and higher each year to protect adjacent farms and homes.

Pheasants Prove Spring is Here

At the Loyalsock Game Farm on March 27, Supt. Peiffer collected 40 pheasant eggs in the laying fields, on a 4 inch layer of snow. Peiffer said that this merely goes to show that "when the moon is right" pheasants will lay, regardless of weather.

It has been Mr. Peiffer's experience in 20 years of game propagation that some pheasant eggs were laid, regardless of weather, the last week of March every year.



John Hamilton, Coudersport, trapped these two fine beavers on February 25 in Keating Township, Potter County. The large pelt measures 80 inches across and came from a 61 pound "broadtail." In all, 2,777 beavers were harvested in Pennsylvania's 1950 beaver season.

Highway Toll of Wildlife

Game Protector Clyde Laubach, who has charge of an area of about 300 square miles in Northumberland County, recently made a report on wildlife killed on roads in his district. His findings are typical of those reported in other sections of the Commonwealth.

In a 9 months' district tabulation, the record reads: rabbits, 158; pheasants, 8; squirrels, 7; deer, 29; skunks, 34; opossums, 68. The deer were handled by the officer or were authentically reported. The other wildlife species enumerated are only those that Laubach personally counted and do not, of course, tell the complete story of wildlife road-killed in his district.

It is interesting to note that in the district reported opossums and skunks, which prey on the young or eggs of groundnesting birds and animals, are presently numerous out of proportion to small game species. They met death on thoroughfares in this ratio: one opossum was killed for every 2½ rabbits, and 8½ opossums for every pheasant; one skunk was killed for every 5½ rabbits, and 4¼ skunks for every pheasant.

The Falcons of Pennsylvania

By ROBERT D. McDOWELL

During the period 1924-1937 a limited number of Duck Hawks, Pigeon Hawks, and Sparrow Hawks were examined by employees of the Pennsylvania Game Commission. Sutton, Luttringer, Langenbach, Latham, and the writer did analyze the stomach contents of 22 falcons. Their combined findings are tabulated below.

The stomachs of 13 Sparrow Hawks contained 9 insects, 4 mice, and 3 passerine birds.

The stomachs of 4 Pigeon Hawks contained 6 passerine birds.

Nothing but avian prey was found in the stomachs of Duck Hawks. The breakdown is: 1 passerine bird, 2 unidentified birds, 1 flicker, and 1 domestic pigeon.

Although the latter two species depend mainly upon birds for food, their rarity entitles them to the protection afforded them by the Pennsylvania Game Code.

Gallivanting Otter

Old-time residents of Fayette County are revising their otter records. No such animal has been taken in that section since 'way back before. Robert Brownfield, R. D. 2, Uniontown, changed all that recently.

Brownfield is a poultry raiser. He had been losing chickens mysteriously. He went out to check a chicken coop a few days ago and found an otter on the inside. The otter reared on its hind legs and showed fight. Brownfield slammed the door shut and hurried to the house for his gun. The otter emerged through a small opening into the chicken yard and made tracks across a nearby field. Brownfield finally got close enough to send a rifle bullet through the fur animal's neck, killing it. He turned the carcass over to Game Protector Meehan, Uniontown.

While it is known that otters travel in spring, certainly this one did not come all the way from northeastern Pennsylvania, where most of the Commonwealth's otters make their home. A reasonable conjecture is that the otter in question traveled waterways from the vicinity of Cooksburg, where a few otters are known to be living on the Clarion River and its tributaries.

New York's Water Shortage— A Conservation Lesson

Shaveless, bathless New Yorkers living on rationed water are learning a hard lesson in conservation which the rest of the nation might well ponder, according to the Wildlife Management Institute. Although the situation has been treated with typical American humor in the press and on the radio, it is only superficially funny. Viewed realistically, the New York problem has too many characteristics of near disaster to be passed over lightly.

Yet there is an ironical twist which may contain an element of grim humor for cynical conservationists, for flowing by Manhattan Island is one of the largest rivers in the East, too polluted for human consumption except at its extreme headwaters. More fortunate communities have no occasion to gloat, for bacteriologists have been peering anxiously through microscopes at samples from dwindling municipal water supplies in many communities while, in some coastal towns, pumps are sucking from wells pushed dangerously close to the salt line. America, as a nation, through pollution, inadvisable drainage, and denudation of watersheds by faulty agricultural and forestry practices, has lowered its water tables and has fouled its surface supplies; yet it wastes more water than it uses.

Americans will hear more of water conservation in the future. As a nation we have labored too long under the delusion that drinking water is something that flows unendingly from a chrome-plated faucet whenever we need it. Water and soil are the two basic natural resources, and their conservation—wise use—is vital to the future security of America.

The Marsh Hawk in Pennsylvania

By Robert D. McDowell

The question of whether or not the Marsh Hawk deserves to be protected in Pennsylvania can be answered by consulting Tables 2 and 3, below.

Because Langenbach, Latham, and the writer recorded each individual of each prey species their combined stomach analyses (1937-1947) are represented by Table 2.

Earlier (1924-1937) Sutton and Luttringer summarized their findings by recording only the appearance of each prey species. Their analyses are shown in Table 3.

The counties in which 76 specimens were taken are shown in Table 1.

TABLE 1

Distribution Record of 76 Marsh Hawks

Bedford	2	Lehigh	2
Berks	2	Luzerne	3
Bradford	2	Lycoming	1
Bucks	3	Mercer	1
Centre	3	Monroe	2
Chester	3	Montgomery	2
Clarion	3	Montour	1
Columbia	1	Northumberland	1
Crawford	2	Schuylkill	2
Cumberland	2	Snyder	2
Dauphin	3	Sullivan	1
Delaware	1	Susquehanna	1
Erie	1	Venango	2
Fayette	1	Warren	1
Fulton	10	Washington	1
Indiana	3	Westmoreland	1
Lancaster	2	Wyoming	1
Lawrence	1	York	2
Lebanon	4		

TABLE 2

Diet Chart of 51 Marsh Hawks

Food	Occurrence	Percentage
Mice	77	80.21
Passerine Birds	12	12.50
Cottontail Rabbit	3	3.13
Grey Squirrel	2	2.08
Chipmunk	1	1.04
Rat	1	1.04
Total	96	100.00

TABLE 3

Diet Chart of 54 Marsh Hawks

Food	Occurrence	Percentage
Mice	29	50.00
Passerine Birds	9	15.51
Cottontail Rabbit	5	8.62
Bobwhite Quail	5	8.62
Red Squirrel	4	6.90
Grey Squirrel	1	1.72
Chipmunk	1	1.72
Unidentified Mammal	1	1.72
Chicken	1	1.72
Unidentified Bird ...	1	1.72
Snake	1	1.72
Total	58	99.97



The marsh hawk usually nests in swamps and lays about five eggs. The young, shown here, fly when about a month old. Mice and small birds, supplemented with insects, constitute the principal fare during early life.

LOOK DOWN THAT LONESOME ROAD—from Page 3

Now we have come to the larger trails in the woods where wheels or runners on sledges have cut into the earth. At some places these have degenerated into mere tracks, and the forest has almost grown over them because they were never so firmly packed as the footpaths; but they widen out occasionally to reveal their original use. That original use was as roads for wheeled vehicles or drags, to get back to remote farms or to take out timber or other products of the forest.

I mean only those roads which have been abandoned, and no longer know any vehicular travel except by some venturesome berry picker or deer hunter who tries to drive "back in" as far as possible. This State's wooded country is a maze of such nearly impassable "roads." The very first settlers did not make them, because they picked out the best farmland available and the first crude roads leading to their farms eventually became the highways of today. The latter wave of settlers, who had to take second and third best, created these now-abandoned roads. When their farms failed, they moved out and their abandoned roads, plus a few fields that are returning to forest and the scarcely visible foundations of their homes, usually are all that remain of their high endeavor and hopes.

I use such a road every summer as part of the way back in when I go camping. We start walking where the old road comes out on a paved highway, and in a few minutes we are deep in the woods and away from sight and sound of the outside world. This is a different world, a brooding world where there are few noises to break the long silences, and where time means little except for the alternation of night and day. The silent forest floor on either side is green and gold where sunlight filters through the leaves overhead and falls on the fronds of ferns creating light and shadow. Over the road the branches often meet and your path is a tunnel boring into the woods.

Very few young persons feel this other-worldness, and sing and shout, or otherwise make noise in defiance of the quiet; but older travellers walk softly and speak in low voices. Why take chances on arousing the ghosts of the men who hacked the road through the woods, built their homes at its blank end, worked there, lived and died there with their families until finally one of them gave up in despair and loaded his family and belongings in a wagon to

bring them back, defeated, over this very same road? We don't even whistle.

Here there are grouse to be seen. Sometimes they get up beside the walker and startle him with the sudden uproar of their takeoff. Occasionally, they can be seen some distance down the road, a mother and her young dusting in the gravel once pulverized by the grinding of heavy wagon wheels. These get up some distance ahead of the walker, and the beat of their wings is but a fluttering murmur in the drowsy quiet.

We often encounter deer along this road, and once I was nearly run down by a startled doe. Three of us were returning from an overnight fishing trip along the river, and, at a point where the old road had banks on either side about three feet high, we scared up two deer on our left. One bounded away from us with white flag bobbing, but the other, apparently frightened out of its wits, dashed straight toward us. This was interesting until I realized that, if the doe continued on its course, it would go right through me. I shouted and waved my fishing rod, the deer swerved a bit and leaped across the road so close to me that she nearly grazed me.

Such minor adventures are about the only ones met with on this typical abandoned road. There is surprisingly little bird life, and the only small animals seen are red or gray squirrels. About a mile and a half in we come to the road's reason for existence—the deserted and fallow fields of the old farm. The forest has established beachheads of brush which thrust out into the unhappy fields and break up whatever regularity of boundaries they once had.

No farm buildings remain, and the sole signs of former cultivation and occupation of the land are some patches of red raspberries which still produce sweet fruit, and a few forlorn domestic flowers growing wild.

The road, deep-rutted and with long grass growing between the tracks, continues beyond the center of the farm a quarter mile or more to the outermost limits of the fields. There, where the land drops off steeply in its descent to the river, the old road ends, and we must take a narrow mountain path for the rest of our trip.

There is scarcely a hilly section in the State where similar aban-

(Continued on Page 31)



THEY'RE DEAD—from Page 5

During the five recent years when grain prices were high, 7,000,000 additional acres went under the plow in North Dakota alone. That's taking a lot of cover from the pheasants. Imagine what the loss to upland game birds and waterfowl has been on a national scale during the same years.

Survival of the young birds is affected mostly by the weather. You may say that we cannot control the weather so nothing can be done about this loss. Remember, though, that good cover is a protection against the elements any season of the year. Poor survival rates may occur regardless of cover if rain and cold weather persist during the hatching season. But when favorable years do come will you have sufficient winter and nesting cover to provide for the increase in birds? A population is definitely limited by either the winter cover or the nesting cover—which ever is the poorer. Nature will kill off the excess birds by one means or another when the carrying capacity of an area is reached—regardless of weather, predator control, or hunting restrictions.

Winter mortality may not be high in normal years even in the northern states. But the shelter provided must be sufficient for the unusually severe winters that do come. Trees alone do not guarantee adequate protection. They must be planted so that snow will not fill the grove completely. In the case of so many of the shelterbelts planted by the U. S. Forest Service in the plains states in past years the snow has drifted throughout the narrow belt, leaving little or no shelter for the birds.

The problem of the predator undoubtedly has come to your mind before this. Conservation and restoration through control of natural enemies has always been a popular subject. Volumes could be written on the role of the predator in game management, the success or failure of the expensive bounty system for control of predators, and related subjects. The point to be made here is that an all-out program to destroy all enemies that prey upon your favorite game birds is not only undesirable but may be indirectly harmful to the very species you are trying to protect. A program of local control is sometimes necessary and effective but should be carefully investigated before being carried out.

A prolific predator like the crow may be persecuted for years on a state-wide and national scale without much possibility of



Agricultural operations destroy most pheasant and quail nests and eggs.

decreasing the total population noticeably. Likewise the coyote is well able to take care of the perpetuation of his race. But many of our larger birds and animals definitely should not be exterminated. The hunter must consider values to people other than himself. Balance the harmful habits of some of the condemned species—yes, even the Red fox—against benefits to agriculture, trappers and other persons, and the result may not be too one-sided. But that is hard for some sportsmen to understand or accept.

A more dangerous accompaniment of an extensive predator control program in a community is the feeling among the sportsmen that their job is done if a few hawks and coyotes have been killed or if a bounty law has been passed. The result is the postponement of the only program that will permanently benefit their game birds—a "back to the land" program of habitat restoration.

Game technicians admit that they have no cure-all for the shortage of game birds and animals. Experimentally and by public demand they have tried artificial propagation and restocking, refuge programs, closed seasons, bounty systems for predator control—and all have been found wanting. They have offered the paths of least resistance or satisfied the demands of the sportsmen in the past.

Now the state conservation departments are working toward a basically sound program—preserving areas of suitable environment for wildlife and restoring in as far as is practicable a portion of the hundreds of millions of acres of habitat destroyed in recent years. No one state or national agency can do the job alone. It will require the cooperation of the State Conservation Departments, the Soil Conservation Service, the U. S. Forest Service and all existing organizations that are working with the landowners for soil and water conservation. Increased wildlife populations will accompany better farming practices and a wiser use of our nation's soil and water resources.

What can you sportsmen contribute? First get the facts on wildlife problems. See who or what is killing your game birds and animals. Then back financially, politically and morally every program that will restore natural food and cover for wildlife. It's going to be a slow job with no spectacular, immediate results. But look back ten, twenty or thirty years—compare your favorite hunting spots of that time with their present conditions. Then look ahead as many years—and try to imagine what they will be like if we don't get busy on a fundamental habitat-restoration program.



What can sportsmen contribute? First, get the facts on wildlife problems. See who or what is killing your game birds or animals.

throat. The campers all sat up and answered his calls for help with jeers and derision. 'Look at Jack; he's got 'em again. Kill them, Jack; the air's full of them . . .,' etc. A white bull terrier with us, now rushed forth growling, and seemed also to leap at the man's throat, then to shake himself. Now the man grew calm, and we learned that he had kicked out, not a pack rat, but a long-tailed weasel, which immediately had attacked him. It had run up his legs a number of times, aiming at his throat. He had clutched it and cast it off again and again, but it had persisted, and might have done him serious injury, but for the prompt assistance of the bull terrier."

Mustela never heard of the cliché, "Discretion is the better part of valor." Seton relates an incident that shows how little discretion one Westchester County (N. Y.) weasel had in his activities against a large yellow mongrel: "Bordering the road that ran by our house was a long wooden fence with upright slats about three inches apart. I was standing by this fence one August morning, and with me was a friendly yellow mongrel. I was waiting for the postman and the dog was aimlessly sniffing around in the grass. Suddenly I heard a yelp, and looked around just in time to see a weasel slip through the fence, while the baffled dog barked excitedly on this side. The weasel knew it was out of reach, but seemed in no hurry to leave. Instead it suddenly darted again through the fence, and jumped at the dog's face. This surprised animal drew back his head with a yelp, then bumped his nose against the fence, as the weasel again slipped through to safety. The little beast seemed in no way inclined to seek safety in flight, which it could perfectly well have done. Once more it darted through the fence. But this time the dog was ready for it, and as it sprang, caught it in his jaws. One crunch, and all was over."

Soper, writing in Canadian Field Naturalist in 1919, gives further interesting data of the short-tailed weasel's indifference to and lack of fear of man: "One day I travelled up a long, dark timbered ravine, southeast of Edmonton. At the base of a big spruce, I had a set for ermine, which on inspection showed the bait stolen. A few minutes' hunting secured another hare with which to replace it. The meat, being warm, was no doubt exuding a tantalizing odor to furtive nostrils, for, as I knelt at the trap, a faint rustle like leaves in a light breeze, attracted my attention. There was no wind, so I concluded that it was a shrew, but looking quickly, following a repetition of the sound, I saw a beautiful snow-white ermine silhouetted among the dark roots of a spruce,

YOU WEASEL—from Page 7

not three feet distant. It eyed me for a while, head held high and nose aquiver; then it disappeared. But the next moment, back it came, followed by a rapid series of disappearances and reappearances. I then laid the rabbit near the roots, and the intrepid little rascal ran out, bit into the meat, and retreated. After doing this for a while, he would pertly mount the rabbit's carcass with his front feet, draw one foot up under his breast as if it were cold, and gaze me straight in the face. Ambition was now chasing away all discretion. His next move was to bite into the rabbit's ear, and attempt its removal to the hole. The brave attempts, following this consuming desire, were indeed very commendable."

Weasels instinctively dart at the neck and throat, and their sharp claws enable them to easily run up a man's trouser legs and shirt or coat. A countryman, walking the moorlands in England, was attacked by a "colony" (probably a family of parents and nearly-grown young) of weasels, and had such difficulty driving them off and protecting his throat and face that he suffered complete exhaustion and had to be treated for shock. This man was no weakling, but a seasoned outdoorsman, who had tramped the moors, in all weather, for years.

Three species of weasels occur in Pennsylvania: the large New York weasel, or stoat, 15 to 18 inches in total length, of which 6 inches is tail, and weighing 8 to 12 ounces. The short-tailed or Bonaparte's weasel, weighing 3 ounces, 12 inches long, including 4 inches of tail; and the tiny 7-inch Alleghenian least weasel, with a one-inch wisp of tail, weighing 1½ to 2 ounces. These measures and weights are for males; females are nearly a fourth smaller.

These mustelids are not uncommon and are widely distributed in Pennsylvania in any wooded or rural district. Over 1,000,000 were presented for Bounty from 1915 through 1935, with 88,578 representing the peak annual take (1933-34). Their fur is now valuable, so the trapper fares well, in addition to the \$1.00 bounty; 22,323 were trapped in 1946-47.

The least weasel was not recorded in the Commonwealth until 1900, when Samuel Rhoads named it *Putorius Allegheniensis*, although the specimens were taken in Washington County in 1885 or 1886. They came to light in 1899 in response to a circular distributed throughout the State, asking for in-

formation about rare mammals. Female least weasels with young have been found in Pennsylvania in October, January and February, which indicates extremely varied seasons of birth or more than one litter a year. This situation differs sharply from the habits of the other *Mustelidae*. Four to six form a litter.

Young of Bonaparte's and New York weasels number five or six and are born in late April or early May. Nests lined with mouse fur, dead grasses and dry leaves have been found in ground squirrel burrows, in stone walls, in hay mows and under tree roots. John Burroughs, the old sage of "Slabsides," excavated an elaborate den with a labyrinth of galleries, dining halls, back alleys and tunnels, under the spreading roots of an old chestnut.

Weasels, in pursuit of prey, do not hesitate to plunge into water and swim vigorously. They have been thus observed, chasing chipmunks and squirrels, with the rodents coming out ahead in the swimming race.

Weasels squeak and chatter when angry. They are known to purr and to coo, softly and musically.

The value of his coat gives the weasel one serious enemy—man. For instance, 359,334 ermine skins were marketed in Canada in 1922-23. Other enemies would include other weasels, the pine marten, foxes, coyotes, great horned, barred and snowy owls and rough-legged, red-tailed and goshawks. However, the weasel's meat is too strong and tough for most carnivores, except in starvation periods.

Good photographs of weasels are rare—the little beasts move too rapidly. One of the best I've ever seen is of an ermine, taken by Wendell Chapman in winter in the Yellowstone. This photograph appears in *Wilderness Wanderers*, by Wendell & Lucie Chapman, Scribners, 1937. Three excellent photographs of a semi-captive weasel appeared in *Nature Magazine* for January 1929. They were taken by Gayle Pickwell and show the animal in most characteristic poses.

Louis Agassiz Fuertes has some fine weasel paintings in *National Geographic's* "Wild Animals of North America." Paul Bransom and Lynn Bogue Hunt have both made striking weasel illustrations. But the old master, Charles Livingston Bull, is supreme in catching with his superb draughtsmanship the lithe movements and snake-like attitudes of the little brown and white death.



LOCOMOTION MECHANICS OF WEASEL RUNNING ON SNOW . .

SHRUB LESPEDEZAS—from Page 9

in the colder sections of the country and these not very fully, biologists of the Soil Conservation Service and the state game commissions developed plans to test more widely these and all other available bush types. Material for these trials was obtained mainly through the Nursery Division of the Soil Conservation Service from accessions under initial observation at its various nurseries. They consisted for the most part of early introductions that had been grown for some years at the United States Department of Agriculture Experiment Farm at Arlington, Virginia, and of species secured later from technical seed exchange contacts in China and Japan, and from arboretums in this country.

Some of the early trial plantings were placed with farmer co-operators in soil conservation projects and in soil conservation districts. Beginning in 1939, however, the field testing has been conducted almost entirely as cooperative ventures with state game commissions and state agricultural experiment stations, and located on state and Federal lands. In Pennsylvania, for example, the earlier tests were made on Pennsylvania State Game Lands in Lebanon and York Counties. They since have been extended to other units in many parts of the state. After eleven years, these trials are showing definite results. We know much more about the characteristics and habits of the various species and of their ability to succeed on various soils and in different areas.

Most of the early farm plantings contained only bicolor and *L. cyrtobotrya*. Other species included in the cooperative trials are: *L. thunbergii*; *L. formosa*; *L. robusta*; *L. japonica intermedia*; *L. maximowiczii*; and *L. kiusiana*. It should be noted that the names under which some of these lots of plants were received and planted are in doubt. For example, it seems quite likely that some of the ones labeled *formosa* are actually a strain of *L. japonica*. This problem of taxonomy is of little concern to us so long as we finally get the kinds of plants to do the conservation job. Still other species of the woody lespedezas are now in test for initial observation at the National Observational Nursery of the Soil Conservation Service, Agricultural Research Center, Beltsville, Maryland. As soon as any of these show promise and enough plants are available they will be included in the cooperative field tests.

Some selections of *cyrtobotrya*, *thunbergii* and *formosa* are still being studied but for the most part these species do not appear to have the qualities needed for northern use. The germination and stand development of *cyrtobotrya* in field plantings has been very erratic, not nearly as dependable as bicolor. It is generally a little earlier in maturing seed than common bicolor but is not as early as some of the selections of other species. *Thunbergii* seems to be definitely too late maturing for use farther north than Maryland. The trials of *formosa* have been very inconsistent, some being quite early seeding but most about like regular bicolor. There is some evidence that *formosa* may not be as long lived as the other species.

Little is known yet of the species *L. maximowiczii* and *L. kiusiana*. What is known is not particularly encouraging. Their growth form is quite open and the time of seed ripening is quite late.

The three species that look best at this time are bicolor, *L. japonica* and *L. robusta*. Strains of each of them ripen their seed well before the first of October. They all appear to be hardy well north into New York and New England and to produce consistently good stands on a wide variety of soils. Bicolor and *robusta* are large plants ranging from eight to twelve feet high. *Japonica* is a much smaller type, its height being from four to six feet. The first two have mottled brown-purple seeds while the latter has black seeds. The *japonica* dies to the crown each year whereas the better strains of bicolor and *robusta* maintain most of their top wood.

More recently effort has been made to capitalize upon the results of the earlier field trials by extending them to include individual plant evaluation and the perpetuation of desirable qualities of leading selections. For example, bicolor hardens its seed about the second week of October. Obviously this is too late to miss the early killing frosts in most of Pennsylvania and the other northern states. On the other hand it has been observed that out of thousands of plants in a block there occasionally is a specimen that ripens its seed exceptionally early and holds it on the bush exceptionally late. Examination by the writer of several acres of bicolor, *cyrtobotrya* and *thunbergii* on Ross Brown's farm in Bedford County, Pennsylvania last mid-July revealed six bicolor plants then in full flower a month ahead of the usual time. Similarly, two years ago three



USCS Photo

Test plots of several species of shrub lespedezas on Pennsylvania State Game Lands at Mt. Gretna, Lebanon County. Cooperative tests between conservation agencies have demonstrated the merits of these plants and have aided in finding superior strains.

plants of *L. cyrtobotrya* that made their seed very early were found in a planting on the Mt. Gretna Game Lands in Lebanon County.

Assuming that such characteristics are transmitted, to a degree at least, to the offspring, these mature plantings are examined systematically to locate early flowering and early maturing varieties. The selected plants are carefully described, tagged and the seed collected. These data are then correlated with such influencing factors as site conditions and period of average killing frost.

These individual plant selections are then propagated at the National Observational Nursery. The resulting seedlings are used in two ways. A definite number of each selection is placed under test at Beltsville in comparison with other species and strains of definitely known vegetative and fruiting habits. The remainder go back to the field and are incorporated in the cooperative trials for comparison with the parent stock and other varieties being tested. Thus the earlier field tests and the subsequent individual plant evaluation combine to give impetus to the cooperative effort to find and make available for general conservation use the earliest, most persistent fruited, highest yielding shrub lespedezas.

By this selection process have come some of the best of the varieties for planting in the northern states. Two selections of bicolor, one of them being of a subspecies called *L. bicolor japonica*, both made from plantings at the Beltsville station, are especially encouraging. One of these selections is both early maturing and heavy producing of seed. It will soon be described by Dr. Frank Crider, director of the observational nursery. Another Beltsville type of *L. japonica* of subspecies *intermedia* seems equally good for the smaller statured species. It seems likely that the best of all these woody lespedezas will be suitable for planting over much of our eastern pheasant range.

Supply of Improved Lespedeza Stock Being Increased

Bicolor lespedeza seed and plants have been in great demand for quail and other wildlife habitat development for years. Even now it is not possible to meet this demand despite the production of tons of seed and millions of seedlings each year. It will be quite a while before the production of the new varieties for northern use begins to fill the need. As a matter of fact, every available seed of these new strains is now being used in nurseries to grow seedlings. These seedlings have been planted for testing and seed increase, mainly on public lands. Beginning in the Spring of 1950, some plants of the new types will be distributed to interested farmers in soil conservation districts in order to get confirming trials under all kinds of field conditions. The majority of the plants of the proven types will still go to make seed production blocks, mostly to state conservation agencies on a cooperative basis. In Pennsylvania, these will include the Game Commission and the Department of Forests and Waters.

FINISHING THE STOCK—from Page 10

end grain at the front of the pistol grip and the nose of the comb, buff off the sides with fine abrasive paper until the more absorbent end grain catches up with it. In this way you will prevent the formation of an uneven finish.

Gun nuts often bemoan the fact that real, honest-to-gosh kettle-boiled linseed oil is nearly impossible to obtain, but the truth of the matter is that commercial boiled linseed oil is better for this purpose than the old fashioned stuff. The commercial oil is not boiled at all, but instead has a drier added, causing it to harden in a fraction of the time required for either raw or genuine boiled linseed oil.

When the pores of the end grain are completely filled you must quit sanding and build up a good smooth coating of hardened oil over the entire stock. When the finish is complete all pores should be filled flush with the surrounding wood. If your stock contains rather large pores it may be necessary to sand the whole stock several times between coats until they are satisfactorily filled.

The final operation consists of rubbing down the surface with rottenstone. Tack a piece of heavy felt over a wooden block as shown in fig. 1. Dip this pad in olive oil, then in rottenstone, and rub it over the entire surface of the stock. Polish with the grain and continue until every square inch of the finish has a smooth, subdued gloss. This is the celebrated dull oil finish.

Don't get so blamed enthusiastic about a London oil finish that you forget my warning about trying it on dark, soft wood. Frankly, this treatment is not suitable for most American walnut, the majority of which soaks up about a gallon of oil and winds up looking about as handsome as a creosote-saturated telephone pole. However, if Old Man Tradition has a strangle hold on you there is one way you can have an oil finish on your new stock of soft wood. Slap on a coat of hot raw linseed oil to color the stock. When this is dry fill the pores with paste wood filler, following the directions on the label. After wiping off the filler across the grain allow it to dry thoroughly, then remove all traces of it with fine sand paper. Now apply boiled oil as previously described. You will find the filler prevents further darkening of the wood, but, because it also

prevents perfect binding of the wood and the boiled linseed oil, it isn't quite as durable as the regular treatment.

A better finish for dark, porous wood is the varnish-over-oil method. In fact, despite the unmerciful panning varnish has received at the hands of the oil finish lovers, this finish is considered by some of our best stockmakers to be equal to the London oil finish for any type wood.

In the first place, their objections to varnish on the grounds that it is easily chipped and scratched are based on ordinary varnish, not on the finest grade marine spar varnish which we will use for this job. Furthermore, good spar varnish is practically unaffected by weather or climatic conditions, and if properly applied will take quite a beating before it shows any unsightly battle-scars. In addition, this finish will give Miss London oil finish some tough competition in any beauty contest—she's really a neat dish.

Here's how it's done. First sop on a heavy coat of hot linseed oil as before. If your stock is still too light in color rub in a bit of walnut or mahogany oil stain and allow this mixture to dry thoroughly. Follow this with a generous coating of boiled linseed oil, rubbing it into every pore and wiping off the surplus with a rag. Now, before this last application has dried rub on a coat of spar varnish, using a swab like the one in fig. 2 made of a ball of cloth scraps wrapped in a single layer of lint-free cloth and tied with a string at the top. Rub in the varnish briskly and thoroughly, causing it to penetrate deeply and unite with the oil to form a practically chip-proof finish.

When the varnish is as hard as it will get smooth off the stock with fine sand paper, wipe off the dust, and rub on more varnish as before. Sand when dry and repeat until the pores are completely filled. When cutting down the varnish allow only a thin coat to remain to avoid piling up a thick layer of varnish that is neither pretty nor durable. When the pores are filled and even with the surface sand all parts of the finish to a uniform thickness.

Now take a swab like the one you used for varnish and dip it into some raw linseed oil, then into powdered pumice. Rub the stock with this abrasive until the finish is glass smooth with no suspicion of bubbles or "pimples," but be careful not to cut through the varnish into the bare wood. When properly rubbed with the grain the varnish will have a beautiful satiny sheen; a finish worthy of use on the finest firearms.

Perhaps you're one of those individuals who desires a bit of rest and relaxation following that strenuous ordeal of stockmaking, and would welcome a formula for a finish in which muscular exertion is held to a minimum. Surprisingly enough, there is a rather good finish that is easy to apply, and, while it isn't equal to those finishes already described, it isn't so completely stinkeroo as some linseed oil worshippers would have you believe.

The finish I hesitate to mention is produced

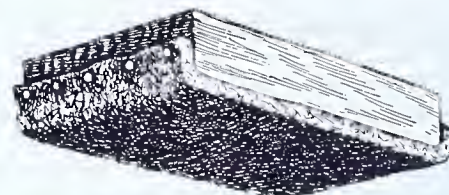


fig. 1 FELT PAD USED WITH ROTTENSTONE....

with plain, unadulterated spar varnish. Granted, any old varnish smeared on a stock any old way won't produce a desirable finish, but by using the best marine spar varnish and a few simple tricks you can produce a swell finish in just a few days.

First, fill the pores of the wood with paste wood filler colored with whatever oil stain you like best. After sanding off the remains of the dry filler you will probably want to tint the wood a bit more with the oil stain, as the varnish will not noticeably darken the wood.

When the stain has dried brush on a smooth, even coat of spar varnish. It is important to do this in a dust-free room with a perfectly clean brush and be sure the stock is free of dust from sanding. Allow this coat to dry until *hard*, then sand thoroughly with fine sandpaper, wipe off the dust and apply another coat of varnish. Repeat as often as necessary—usually three coats will be sufficient. Instead of sanding the final coat, rub it down with powered pumice sprinkled on a swab dipped in linseed oil, and you will find this finish as fine as anyone could wish for. As long as there are no breaks in the varnish it will protect the wood against moisture far better than the average oil finish and it is surprising how much abuse the elastic coating will absorb without serious damage. Due to this elasticity good spar varnish is far less susceptible to scratching than other ordinary varnishes. All in all, it ain't a bad finish.

You're probably wondering how we finish the inletting, etc.; so here's the dope. Regardless of the finish used coat the barrel and receiver with a thin film of your favorite gun grease. In the case of the London oil finish and the varnish-over-oil finish paint the inletting with raw oil at the same time the rest of the stock receives an application of the same. If any gummed oil or varnish gets into the inletting scrape it out to allow the metal parts to enter. When using the spar varnish finish merely give the inletting a *thin* coat of varnish after the last coat on the outside is dry but before it is rubbed down with pumice. While this coat is wet, insert the metal parts and allow them to remain until the varnish is dry.

There are hordes of other formulas for stock finishes, but I'm sure the average gun bug will find one of those I've described to be suitable for his purpose. Each has its advantages and you'll have to take into consideration the type and color of the wood, the amount of time you can devote to the job and the use to which you'll put your gun in order to select the proper finish.



SWAB USED TO RUB ON VARNISH & PUMICE
fig. 2

USABLE ACCURACY—from Page 21

center same range. At the DuBois matches D. A. Robbins of Oil City fired a five shot string which measured .170 inch. This was followed by a sizzling five shot group of .119 inch by Al Hoyer of Yeagertown, Pa., at the Labor Day matches at Johnstown, N. Y.

To get an idea of that kind of accuracy I just put a rule on a mounted squirrel which gazes down on me. A .210 inch five shot group would neatly remove his eye, yet a five shot group of this size was an also ran at 100 yards. Ai! Yi! Yi!

Now if you think that's layin' 'em in, take a glance at what's happening at 200 yards. That's about where the crows squat in my neck o' the woods. One of the first hot groups was fired in 1948 by Samuel Clark, Jr., that measured .541 inch center to center. In the same year Chet Leach made a five shot group that measured .483 inch. This year at Oil City R. F. White fired a five shot group that measured .410 inch. Now comes the payoff. In a later Oil City match T. M. Riddle who really got hot fired a group right off the griddle that went .399 inch center to center at 200 yards. This I believe stands as the record shot in competition. This is considerably smaller than a crow's head. Just in case you are

interested in the outfit that made this record, it was a .219 cal. Wasp with a 50 grain Sierre bullet and 26 grains DuPont No. 3031 powder. Velocity not given but probably better than 3,000 ft.

Now this is astounding accuracy but just what does it mean to the average Joe who has a yen to bust some crows that don't want to be busted or a groundhog who wishes to stay out of the oven. About as much as what Barney Oldfield burning up the Daytona sands meant to your Dad and his flivver. It's simply a preview of the future. Its effect on manufacturers and shooters alike cannot be under estimated. At present extremely heavy and unwieldy rifles running from 15 to 18 pounds and a wide variety of wildcat cartridges (all of them a handloading proposition) are not for the average shooter. But they are a great step in the right direction.

The one thing to remember is that accuracy in itself is not always the determining factor in the ideal rifle for a particular purpose. The main thing to keep in mind that practical field accuracy is determined by size and distance of the target, the trajectory and group size of the rifle. It is the combination of these factors which limits the distance we can hit with certainty.

DOG PERSONALITY—from Page 21

to his master's gun, handles his game and retrieves the kill, he'll find a warm corner in my heart, regardless of the height of his head or tail. He will not be required to reach technical perfection to be honored in my book.

The world of sportsmen have made great progress in developing better gun dogs, and generations to come will benefit by careful breeding, efficient training methods and keen competition. From superlative field accomplishments we have learned the qualities to expect in our gun dogs, and every gun dog lover strives to own the animal that leads the field. That is as it should be, yet there are times when I feel that we overlook greatness in many dogs because they may lack super speed or perfect style. Give a dog

every chance to show himself because he is an individual and the faults you see in him today may make him greater tomorrow.

Do not become dissatisfied with your dog when you walk with the gallery behind the trial winner, because the plain fact is that truly high class gun dogs come few and far between, and represent a treasure that comes to many a gunner only once in a lifetime, if at all.

Study your gunning companion and give him every opportunity to develop his own personality and at the same time learn you, your peculiarities and your desires. It is not wise to condemn him if he does not follow the same pattern as your former ones. Utilize every opportunity to know your dog better and the faster friends you become the greater your gunning experiences will be, come fall.

LOOK DOWN—from Page 26

doned lanes and roads leading back to old farms cannot be found; but their number is as nothing compared to the thousands of ancient logging roads that cross and crisscross land that was timbered over long ago and now is returning to forest again.

When tired of plowing through brush and deploying around rhododendron patches while hunting grouse or deer, I like to look around and find one of these logging roads, and rest a bit by following it for a distance. This may be a lazy man's way of hunting; but I have found that I kick up as many grouse this way—and miss them—as I do by taking the rougher route through the forest.

Nine-tenths of these roads lead exactly nowhere, and the hunter gunning in strange country must be cautioned against following one of them in the hopes that it will guide him to a main highway. It is often possible to follow one for a mile or more and wind up within a few yards of where you started. Or, the road may lead up hill and down dale where the old corduroy logs still remain in the roadbed and come to an absolute dead end of blank forest.

Never follow them if you expect to get anywhere, unless they show signs of recent vehicular travel. They weren't built as highways, but simply as paths in the forest to expedite removing logs in the old lumbering days. Thus, a logging operation might have been concentrated along a river where a splash dam had been built, and the loggers had to build roads to move the logs to the chutes leading down to the river. The nearest highway might be many miles away, and the logging roads would lead only to the river down which the booms would be floated. Hence, the bewildered hunter travelling these logging roads would return again and again to the river.

If, however, the hunter or hiker knows the country well, or has a good sense of direction, it is fun to strike out on these logging roads and follow them. They are as complex as a maze, crossing each other or branching out in all directions. Deer travel them if the roads suit their purpose, bears may lumber along them, smaller

game may hurry across them; but, generally, the old logging roads are silent and forgotten.

Gone are the sound of axes, gone are the crews of rough loggers and the giant trees they cut, gone are the heavy sleds and wagons that creaked and groaned over the roads to a jingle of harness on the heavy draft teams that pulled them. Gone is the smell of wood smoke and hearty food around the cook camp, and gone, too, is the camp. Only the roads remain, and the rotting stumps.

I have followed such roads in all seasons, spring, summer, fall and winter, and they are inviting at all times. Once, when ice encrusted everything, I took a rifle and walked for miles along such roads for the sheer visual pleasure of seeing each twig and branch sparkle in the sun. At time I had to get down and crawl under the laden boughs which hung over the road, and my crunching progress over the crusted snow made deer hunting absolutely impractical—but I used carrying a rifle as an excuse to be abroad that day.

I could almost imagine that the metallic tinkle of icy twigs striking each other was the jingle of harness on the horses that once pulled sleds over these same roads in winter, and that the thud of a huge load of ice cascading off some overburdened tree to the crust below was the sound of a forest giant falling before the axes and saws of the loggers. Then a red squirrel—the only "wildlife" I saw that day—would run down a trunk to chatter curses at me and break the spell.

There are mysterious paths in the forests, tracks that run mile after mile for no apparent reason. I have followed some for miles and then had to turn back; but I know the country well and can't imagine where they lead because there is nothing but woods and swamp in the direction taken by the trails. Yet, they must have been travelled heavily at one time because they are packed down and quite plain.

Sometime, I'd like to put a pack on my back and track them down. Sometime, I'll do it, too,



THE BOBCAT OF MCKEAN COUNTY

By Colonel Henry W. Shoemaker

AN experienced hunter and naturalist of Smethport, McKean County, Mr. C. W. Dickinson, has described the true Pennsylvania wild cat, sometimes called the Bobcat and erroneously called the Catamount, as follows: "The average grown wild cat measures 30 inches from nose to base of tail, has a 4 inch tail, and weighs about 26 pounds. The longest cat I ever saw tipped the scales at just 32 pounds. The wild cat only raises one litter of kittens annually and they are usually born about the 15th or 20th of April. The number of kits in the litter varies from two to five while the weight of a kitten at eight months of age will be from 13 to 17 pounds. It takes them about three years to get their full growth."

It is the opinion of many of the old hunters that the cat, as well as the panther, did not like to stay in a locality inhabited by the grey wolf, as the wolf usually roamed about in droves or packs of from two to ten or twelve animals. It seems that the cat family was deathly afraid of the wolf family, their fear probably being due to the superior numbers of the wolf family traveling together.

Thus, it was really surprising how fast the cat family increased in a locality after the wolf became extinct. There are probably three times as many wild cats in McKean County today as there were fifty years ago, notwithstanding the fact that they have been hunted hard since the bounty laws were enacted. Yet, I do not think there is more than one cat now to where there were three fifteen years ago.

They are practically extinct in the Blue Mountains, the Bald Eagle Mountains, and the main chain of the Alleghenies. In North-eastern Pennsylvania a few are taken annually in the Blooming Grove Preserve in Pike County while in Clinton County some are trapped every year in Otzinachson Park, drawn there by the rabbits and entrails of killed deer. They will last longest in parts of McKean and Cameron Counties, away from settlements, in the Seven Mountains of Centre and Mifflin Counties, and in eastern Clinton County unless the ideal habitat there is destroyed by the increasing number of forest fires.

There is a great diversity of coloring in

Game Law Violation List Discontinued

At a meeting of the Pennsylvania Game Commission on April 6, it was agreed to discontinue the publication of the list of game law prosecutions in **GAME NEWS**. Although the post-war wave of lawlessness in hunting has not abated, it was felt that the public could be better informed of game law violations in other ways. The Commission therefore approved a plan to mail a list of hunting license revocations, resulting from the more serious offenses, to all sportsmen's organizations, newspapers, hunting license issuing agents and employees of the Commission following each Commission meeting.

THINGS YOU MAY NOT KNOW

There are 10,000 miles of fishing streams in our national forest.

Snakes cannot blink their eyes. They have no eyelids. Their eyes can absorb bright sunlight but are blinded by twilight.

The world's largest rodent is the Capybara rat. It often grows to a length of four feet and sometimes weighs as much as seventy pounds. It is web-footed.

Crayfish eyes are dark at night and light in the daytime.

specimens of Pennsylvania wild cats. They are mostly of a cinnamon brown color, black striped or spotted on the legs, shading into a white or marbled color on the belly. Some are of a rich chestnut brown color, beautifully spotted with black, while a few are of a drab grey color, the black markings resembling bars rather than dots. They usually have a white patch on the ears.



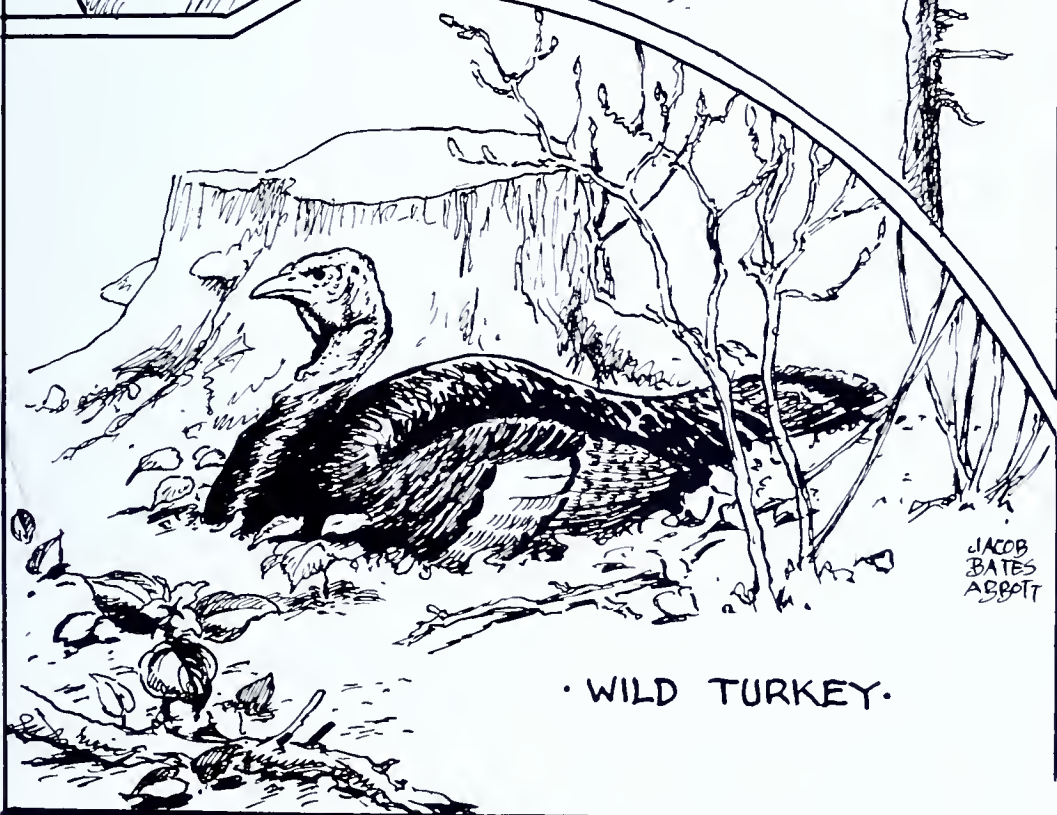
SOME OF THE RAREST NESTING BIRDS
IN PENNSYLVANIA . . .



• NORTHERN
RAVEN •



• DUCK
HAWK •



• WILD TURKEY •



• PILEATED
WOODPECKER •

JACOB
BATES
ABBOTT

THE STORY BEHIND THE COVER



More than 7,300 farmers are now taking advantage of the mutual benefits afforded by the Pennsylvania Game Commission's Cooperative Farm-Game Program. Like Harold Book of Juniata County's Project No. 108—shown in the center on this month's cover receiving evergreen seedlings from Farm-Game Manager Gil Bowman, Lewis-town (left) and District Game Protector Owen Seelye, Mifflintown, (right)—landowners find an answer to their problems of property rights, wise land use, and conservation cooperation.

With full realization that the farmer is "conservation's key-man," the Game Commission for many years has sought methods of creating friendly relations between hunters and farmers. No matter how wise nor how intensive the Commission's small game program might be, it is a simple fact that the program is doomed to failure unless there is farmland on which Pennsylvania's tremendous army of hunters can seek game and sport. Furthermore, in this age of record demand for large agricultural crops, wildlife is almost universally a by-product of the land—a crop that represents little direct monetary return to the man upon whose land it is grown.

The Cooperative Farm-Game Program was started in 1936 and given legal recognition by Pennsylvania's General Assembly in 1945. Now located in 48 counties, the 151 project areas cover more than 726,000 acres. They typify splendid cooperation between farmer sportsman,

and game administrator and clearly prove the benefits of working together. They are outstanding examples of modern solutions to mutual problems.

For the farmer, the Cooperative Farm-Game Program assures protection to life and property through posting of safety zone signs, patrolling, and law enforcement, especially during the hunting seasons. In addition, the program offers some monetary return through game bird raising and trapping of furbearers and predators. The Commission may also aid the farmer in utilizing waste spots on his land by furnishing various species of game food and cover plants—like the seedlings shown on the cover. Finally, cooperators are supplied advice on soil conservation and other profitable farm practices such as contouring, strip cropping, crop rotation, sod waterways, pasture and woodlot improvements, and windbreak plantings.

For the sportsman, the program offers a place to hunt, an opportunity to cooperate with the landowner, and assurance that small game hunting in Pennsylvania will not become a sport for only a privileged few.

REMEMBER—THE LANDOWNER IS YOUR HOST
AND
COOPERATION WINS!

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The GAME NEWS

WILLARD T. JOHNS, JR.
Editor



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COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR



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STARTING THEM RIGHT

One of the greatest of American freedoms is the right to keep and bear arms. Guaranteed by our Constitution, little hindered by our present day laws, and generally accepted as a beneficial liberty, the right to own and use lethal weapons is so commonly considered inherent by most Americans that abuse of the privilege, enjoyed by few other peoples of the world, is not uncommon.

The strongest advocates of this freedom, perhaps, are too young to appreciate its full meaning. Normal American boys naturally want guns. From the cap pistols to the 20 gauges, the budding Boones, Carsons, or Codys dream of having their own "six-shooter" and "long rifle." And in this era of modern manufacturing skill, powerful, accurate and deadly weapons have easily become within the reach of all. The number of small-bore rifles and air guns in the hands of carefree youths has increased tremendously in recent years.

Unfortunately, the teaching of safe gun handling has not kept pace with the needs of these young marksmen.

The dangerousness of the present day high velocity air rifle or .22 caliber rifle should not be underrated. A BB pellet is easily capable of killing a songbird, breaking a pane of glass, or causing painful human injury—even loss of eyesight—at close ranges. Packages in which .22 caliber bullets are sold bear the warning "Dangerous up to one mile."

With the coming of warm weather and vacation time, youngsters take to the outdoors—often carrying these small weapons. In the carefree minds of some, the responsibilities of handling potentially dangerous weapons rest lightly. Songbirds, telephone insulators, or sometimes playmates—all are easy targets for the unthinking. And when a person is injured or property damaged through irresponsible acts, boys who did the shooting are usually called "juvenile delinquents."

Actually, these acts should be charged to "delinquent parents" who shirk their responsibility. Any boy old enough to own a firearm or air gun is also old enough to be taught how to handle and use his gun safely. The lack of such training is the greatest threat to our right to bear arms freely. Much anti-firearms legislation generates from newspaper accounts of small-bore rifle or air gun accidents, some of which are most tragic, all of which are easily prevented through proper training.

Most people do not object to grown boys having a .22 rifle or an air gun in order to learn the proper use and safe handling of firearms. Certainly, a start must be made somewhere but it should always be under proper supervision of parents or capable, interested sportsmen. The killing power lies in the guns but the responsibility for the proper training in the safe handling of them by juveniles rests with the parents.

TEACH YOUNG AMERICA HOW TO HANDLE FIREARMS SAFELY!

William Parrett, one of our Game Land workers, while trapping fox on Game Lands No. 28 near Hallton, succeeded in capturing a wildcat. This was the first wildcat animal, in the area for more than

The following is a story received from E. H. Hickoff, Emporium: While hunting on the farm of Pius Kutz, a Cooperator on Farm Game Project No. 17, we experienced some fine bird shooting. One of the birds that was badly crippled took refuge in the Safety Zone. With permission we entered the Safety Zone and shot the crippled bird. The dog in the stream bank; a desperado; amazed in five of his brand old one time.—by 'Trex-



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA GAME COMMISSION
HARRISBURG

Dear Readers:

The Pennsylvania Game Commission is developing major improvements in the Game News, starting with the September, 1950 issue. The changes will give you a more readable, more interesting and more easily handled magazine. Some of the new features will include:

1. A reduction in size from 9" x 12" to 6" x 9", so the magazine can be easily carried in the pocket or filed in the library with your books. There will be at least double the number of pages, all loaded with new reading and attractive pictures.
2. A Sportsman's Map showing roads, State Game Lands, Cooperative Farm-Game Projects, Game Farms, streams and lakes stocked by the Pennsylvania Fish Commission, State forests and parks and a key to the different kinds of hunting and where it may be found. A different county map will be featured in each succeeding monthly issue until a recreational guide to the State is completed.
3. Special Issues - Each year Game News will include one or two Special Issues - complete magazines or booklets in themselves on various phases of Pennsylvania's conservation program or on some species of native wildlife. These issues, included in the subscription price, will be similar to the bulletins formerly published separately by the Commission and sold to the public.

This new magazine should be of unusual interest to you — sportsman, conservationist, landowner, or lover of wildlife — as well as to your children and to all who have a warm spot in their hearts for nature and nature's children. It will not only be interesting and entertaining, much improved over the present, but will constantly bring the important messages of conservation to all.

The Pennsylvania Game News has long made every effort to remain a leader in its field. Now we are confident it will take its place on the shelf with other "Keep for Reference" publications. We know you'll like the new improved magazine and hope you'll influence others to subscribe so they will not miss an issue.

WTJ:en

Cordially yours,

Willard T. Johns, Jr.
Willard T. Johns, Jr., Editor

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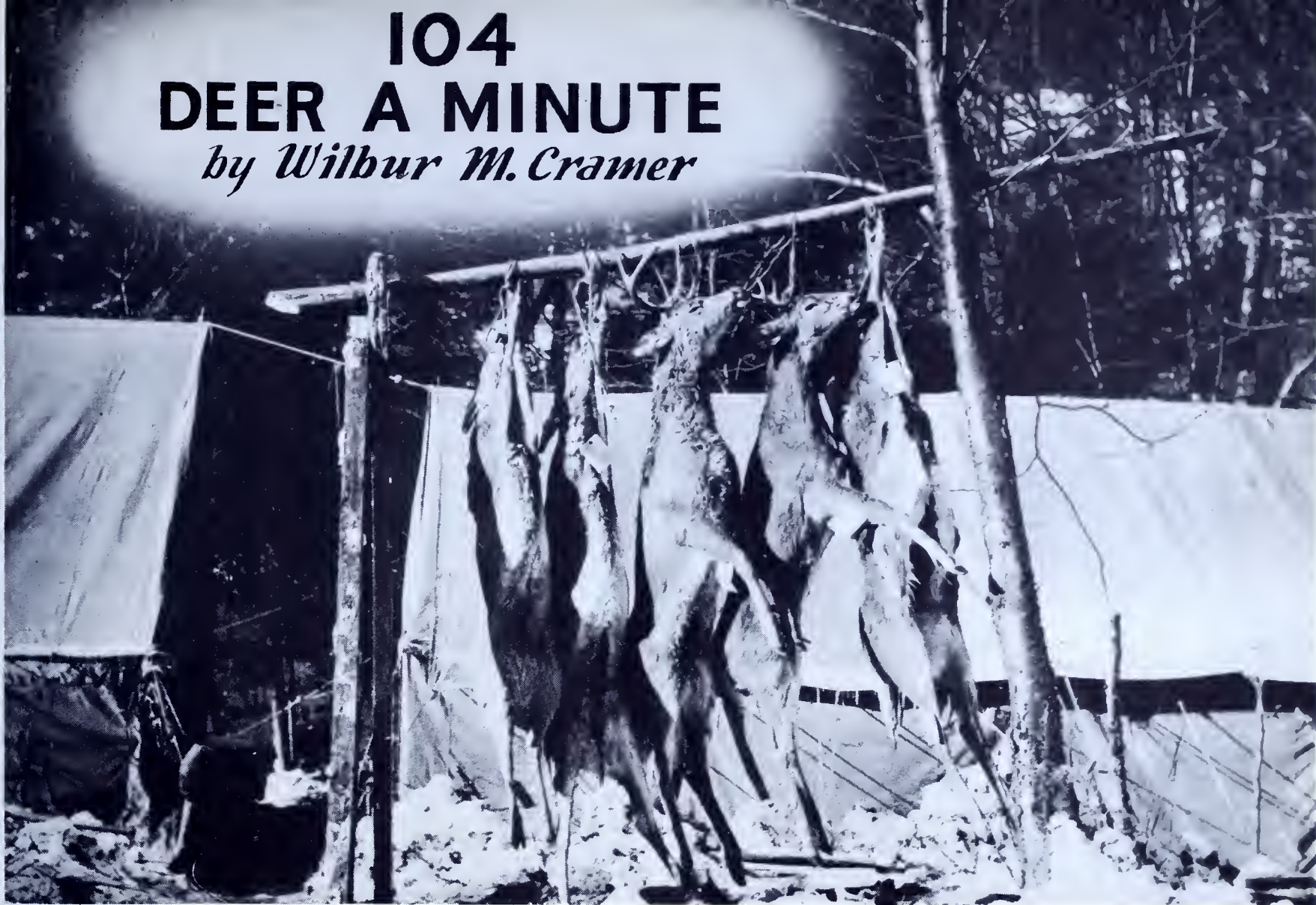
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Food and Cover Crops.

town
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Reading.

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DEER A MINUTE

by Wilbur M. Cramer



HAVE you ever tried "counting sheep" for insomnia? If you are bothered with this perplexing problem which is common among late-at-night coffee drinkers and people who worry or can't relax, it is suggested that you try a new plan to fall into the arms of Morpheus. It may be too slow a job to count sheep going through an open gate or over a low fence, so try counting deer—just the deer killed in Pennsylvania on the last day of the 1949 season, when antlerless deer were legal. There were 84,121 deer killed during ten hours of hunting on that day, or 140 deer a minute. Deer passing before your mind's eye at that rate would at least make you dizzy, if it didn't induce real sleep. To bring the illustration to finer points, imagine an average of two and one-third deer passing before you in a parade every second for an entire day. That's a lot of deer in anybody's language.

We may analyze the deer kill from another angle—area instead of time. It represents an average for the entire State of one and four-fifths deer for each square mile. There were almost 5,000 square miles in the seven counties closed by abrogation proceedings. Out of the remaining 40,000 square miles in Pennsylvania, by being very liberal, we may estimate that 26,000 square miles represents the deer territory, or the area on which one might expect to kill a deer. Therefore, we may conclude that there were three and one-fifth antlerless deer killed on an average for each square mile of potential deer country on December 10.

Actually, it would be more fair to estimate the "true deer range" of Pennsylvania open for antlerless deer hunting on December 10 as comprising 15,000 square miles. To be on the safe side, this figure is higher than that given in Richard Gerstell's articles on "The Pennsylvania Deer Problem in 1938." It would, therefore, mean that there were 5.6 deer killed to a square mile on an average for the State. In one of the principal deer counties the kill

was 6.8 deer per square mile; in another big game county 8.6 per square mile, and in the county where the kill was the highest the average was 12 deer to the square mile, or one deer killed in a one-day season on each $53 \frac{1}{3}$ acres. These three sets of figures are given for the entire counties, and do not represent any deductions for towns, farms, or any other areas. The last one is quite likely a record difficult to surpass in any state for a one-day season.

We must remember that this happened in a state with a population of approximately 11,000,000 and a density of 245 people to the square mile; with 169,000 farms and the second largest farm population in the United States; a state that ranks first in the nation in fifty important industries, which produces more power than any other state; ranks first in coal production and with a state-maintained primary and secondary highway system totalling 40,000 miles.

How many hunters were in the field on December 10? Well, that is anyone's guess. At least 46,602 deer hunters had already killed a buck during the previous eleven-day antlered deer season and were, therefore, not entitled to kill an antlerless deer. If there were 325,000 hunters for antlerless deer, and that is likely a fair estimate, then one deer was killed for every three and eight-tenth hunters in one day, or each hunter's average portion would have been at least a quarter of a deer.

How about the safety of the sport amidst all that concentration of hunters? The records show that there were one fatal and twenty-three non-fatal accidents that day. These figures are entirely too high, of course. There should not have been any accidents. How many accidents would there have been if 325,000 players participated in football games in one day? That would be 7,386 games, with 14,772 teams and 22 men playing on each team at

(Continued on Page 26)



Song of the Swamp

By N. R. CASILLO

THE swamp was redolent with the smell of growing things; the gummy buds of many deciduous trees as well as the resinous ones of the evergreens distilling an aromatic combination which strangely harmonized with the effluvium of muck and sedge.

It was spring. The air, the birds, the trees—everything advertised it. A cardinal in a tall red maple, undaunted by the nearby screams of a redtail hawk, loudly proclaimed it.

Chewinks or ground robins industriously scratched among the dry leaves like so many miniature chickens, their chestnut-red sides frequently reflecting glints of light as the warm, friendly sun hit the bright patches of color. A flicker chattered from atop a blasted beech.

The trees were aglow with the warm yet evanescent tints of springtime witchery. At the edge of the hardwoods where a profusion of trout lilies erected their yellow heads, the tall woody growths gradually diminished both in size and density until they were at last replaced by the seered, gray grasses of the open marshland. But, even here spring flaunted its colors in every clump of red-ozier dogwood and speckled alder.

In a grass tussock on the edge of a bay just north of Fricke's Woods in Pymatuning Refuge, a pair of Canada geese had built a

nest, a bulky structure of coarse grasses and sedges all but covering the bit of solid ground upon which it rested.

The goose, practically invisible as she sat low on the nest, turned her head in the direction of her ever watchful mate as he slowly cruised about on a patch of sparkling blue water; his head erect, intelligent eyes peering deep into the surrounding thickets and windrows of flattened sedges. The great, gray bird was not only a faithful watcher, but also an efficient one.

For almost a minute the gander fixedly gazed at a spot where he had noted a slight movement. Then he turned away only to return to it again. Just as he was about to dismiss the incident as unimportant, a young muskrat came stroking out of an open lead penetrating far back into the fallen swamp growths. The gander quickly dropped his guard as though embarrassed that so unimportant a creature should have caused him so much concern. On the other hand, he knew only too well that the price of survival for both himself and his charges was one of eternal vigilance. As though to forget the matter he struck fiercely at a passing carp, sending the fish scurrying for deeper water.

The mysterious fears of the night together with the more realistic ones of hungry predators as they prowled about for food, are quickly if only temporarily forgotten by the creatures that are hunted; the friendly daylight assuring them that theirs is a measure of safety until darkness once again returns. As the young sun mounted higher into the heavens the brooding goose contentedly shuffled her feathers and settled lower into the nest. Her mate, resting on a low mud-flat, methodically preened his feathers as the lively warmth of the sun worked its magic.

By mid-afternoon of that brilliant spring day the so-called Bullistown pine plantation adjacent to the town of Linesville, was agleam with the rise of resinous sap, the trees reveling in the combination of warmth, abundant water and active chlorophyll. At the edge of the pines where a tiny peninsula jutted out into the waters of the upper or refuge lake, a ruffed grouse had located its nest in the exposed rhizomes of a clump of interrupted ferns.

It was a conspicuous spot for a grouse nest, the leafless branches of the few scattered hardwoods and some black alders providing but scant cover. But even now the unfurling fiddlebacks promised an abundance of cover by the time incubation was started. As it was, only the most discerning eyes could pick out the spot, the hen grouse covering the six eggs already laid, being one of the most efficiently camouflaged of wild creatures. If one looked long enough and hard enough he might pick out the twin glints of the alert eyes. Excluding that bare possibility, the only sure way for a predator to find the nest was to stumble on to it.

The Bullistown grouse were, in a sense, pioneers. Decades ago when the area was cleared, the grouse living there were driven out, most of them taking up their interrupted lives on the heavily wooded hills east of Linesville. More recently, when the Bullis family was compelled to move out because of the newly created reservoir, the remaining unflooded areas were planted to pines.

Accordingly, the considerable stand of thrifty trees recreated the conditions so beloved of grouse; thick coniferous cover, fringed by thin stands of mixed hardwoods scattered clumps of haws, a few native apple trees and the inevitable moss carpet and other resilient growths underlying it all.

So, back in 1947, it was not surprising when game protector Ray Sickles while out on a regular patrol, flushed several of the birds as they fed on the rich checkerberry beds that had developed along with the rest of the profuse ground cover.

That evening back at headquarters on Ford Island, he imparted the information to his deputy, Bill Guiney.

Bill was not at all surprised. "You know," he commented, "I've been looking for this to happen."

"Well, I have, too," said Ray. "But, it's a wonder that it has, being as the place is practically in town," he added.

"Yeah, it is surprising," agreed the deputy, "what with the town dump and all, located right there on the edge of the refuge line."

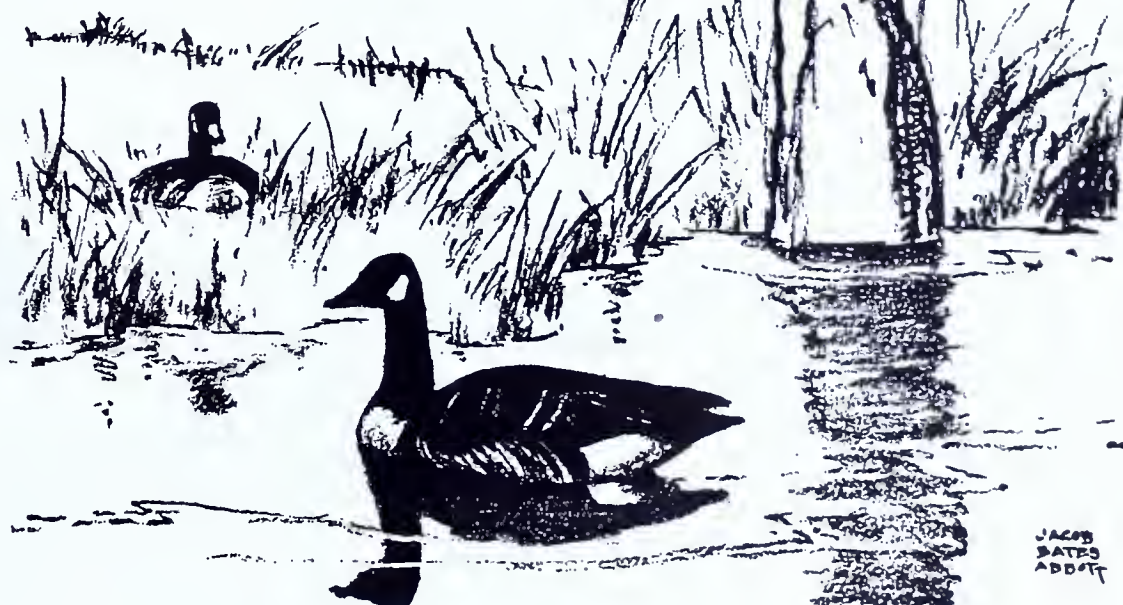
"Lucky that it's a good big piece of woodland," observed the protector, "otherwise, those birds would be driven out into the next township by the noise and all," he concluded.

That the pioneer grouse had fared well was attested by the nest that protector Sickles subsequently found in the spring of 1948. Later on he regularly encountered the mother and her brood of eight or ten youngsters. Predator control in the Bullistown pines was now a foregone conclusion, both men keeping a sharp lookout for mammalian as well as winged freebooters seen anywhere near the place.

Nature's ways are often strange. Knowing her does not necessarily mean understanding her. Indeed, the longer one consorts with her the more mysterious she becomes, until one ceases to wonder at her queer and often inexplicable antics.

Two weeks after the game protector had found the grouse's nest, he discovered, much to his dismay, that a family of mink were living in a den under a log at the water's edge less than three-score feet by actual measurement, from the nest. It was one of those situations calling for the wisdom of

(Continued on Page 28)



"NEMSTROPS"

by Leo A. Luttringer, Jr.



YOU WONDER about the title? Well, spell it in reverse. You're right—SPORTSMEN it is. It is reversed in the title to be consistent with the manner in which many who profess to that title think and act. Some so-called sportsmen can't see farther than their noses. If they could, they would spend less time griping and more time doing; more time helping protect wildlife and less time killing it. They would, above all, spend more to improve their sport in comparison with what they spend equipping themselves to pursue it.

When people spend so liberally for pleasure without any inclination to put back either principal or interest on what they take, is it any wonder that our philosophy has gone into reverse. Maybe the last war upset our mental processes a little bit. Anyhow, something's wrong somewhere, because too many people today are garnished with

too much indifference, and that goes for all groups; not only hunters.

Most of the progressive conservation departments throughout the country have excellent programs for wildlife restoration, but they are trying to conduct them on a shoestring because the sportsmen maintain too tight a grip on their pocketbooks when it comes to shelling out for better land utilization, better law enforcement, more predator control, more propagation and restocking, and all the other things which insure a greater annual surplus of game. They open them wide, however, when it comes to laying the foldin' money on the line for guns, ammunition, dogs, clothing, equipment, gasoline, food, etc., and innumerable non-essentials.

Another difficult thing to understand about some sportsmen is the rapidity with which

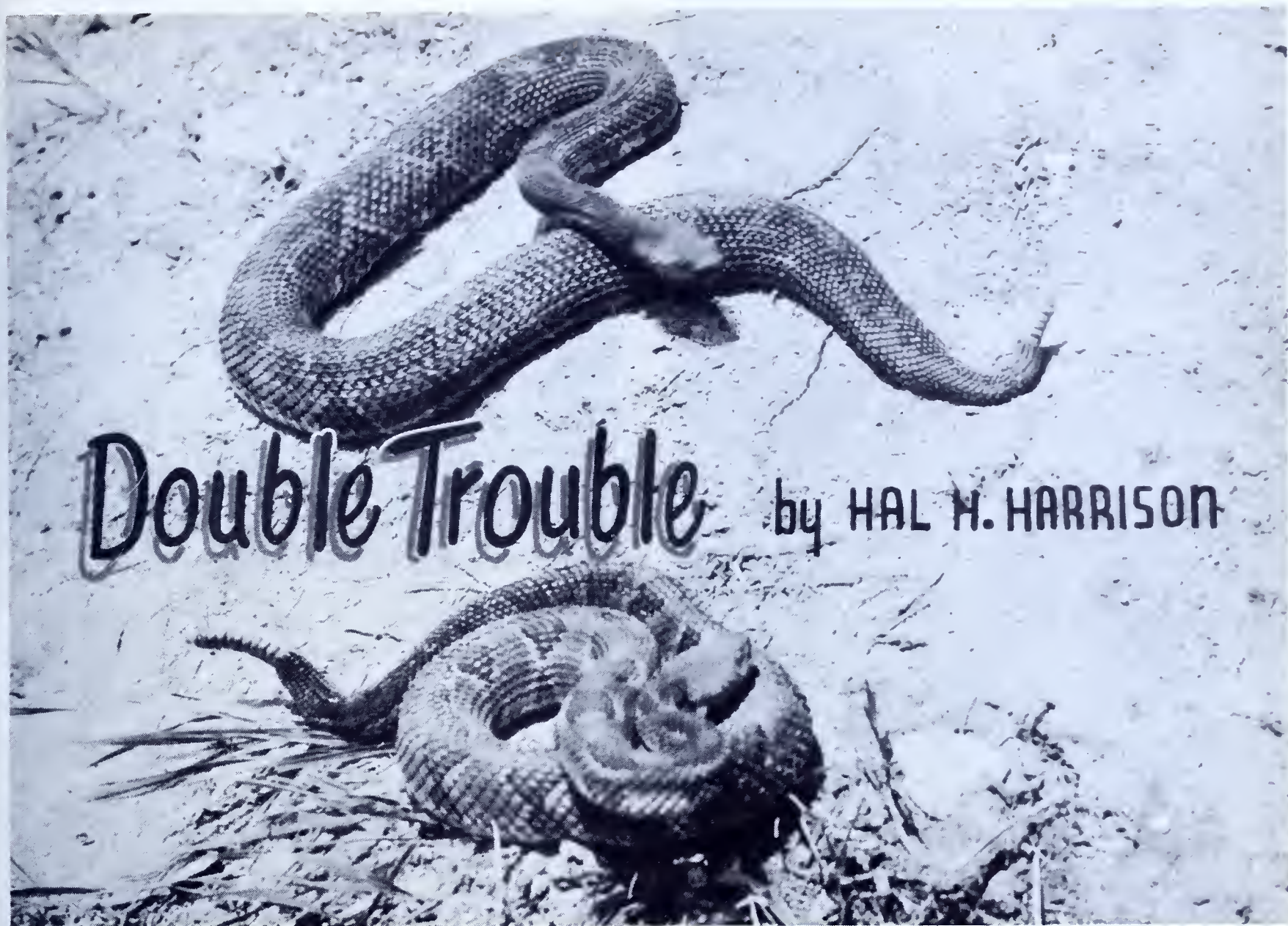
they change their attitude toward other people when they are in the field. All dignity and sense of respect drops from them like a cloak, and the generous and amiable disposition so becoming to them at other times gives way to a selfish, devil-may-care attitude which reflects itself in careless gun handling and disrespect for the landowner and the other fellow in general.

A man who prides himself on his sense of fair play and integrity in his business relations thinks nothing whatever of doing a little cheating now and then in order to satisfy an itchy trigger finger. He wouldn't think of cheating his fellowman in a business transaction, but he would stoop low enough to rob him of his share of the game to satisfy his own false appetite for the sport. It is a question if that appetite is willingly false, or if it is whetted by a deliberate inclination to break the law, or rob the other fellow. The perverted idea of hunting on the part of some is begotten chiefly by a simple change of clothing and equipment.

Garbed for the chase in full field regalia, high laced boots, vest full of cartridges, hunting knife, and gun, a man becomes a new creature. He jumps into his car early the first morning, honks his horn impatiently at every stop until the gang's all collected, enters the usual highway race to favorite haunts, clumps loudly and swaggeringly into a diner for coffee, bacon and eggs, converses loudly—yes, he's a 'he-man out for gore. Ten to one his fanny's draggin' before noon. Every piece of game is his personal enemy, caution is thrown to the winds, dignity gives way to utter abandon, and another gunning season has been ushered in. If this isn't a perverted idea of sport, then we have a wrong picture of sportsmanship.

The only consolation we found after viewing what has been written is that the characters described are still in the minority. It would be bad to see their numbers grow much larger. If the shoe pinches anyone who reads this article, these words will not have been written in vain. It is hoped that it pinches hard enough to make them holler "I'll be good." It is hoped it pinches hard enough to make them change their philosophy to the extent that they help to protect, preserve and perpetuate the wild creatures they like to hunt, by giving as generously of their time, money and effort to replace them as they do to harvest them; and that they feed them and help control their enemies.

Then, maybe they'll understand that hunting is not a free-for-all to kill everything; nor sportsmanship a cover for unrestricted action; nor hunting raiment a symbol of gangsters against Nature. They will learn to appreciate that hunting is an art and a pleasure, a game of sharing; that the badge of sportsmanship is common politeness and fair-play; and that hunting raiment is the field uniform of gentlemen who are also SPORTSMEN, not NEMSTROPS.



IT WAS in a desolate, remote and seldom-visited section along Brigger Run in Shippen Township, Cameron County. Brigger is a small tributary of Whip-poor-Will Run which flows into the east branch of Hicks Run. The time was early afternoon on Thursday, May 19, 1949.

Game Protector Norman Erickson and Fish Warden Lamonte Close were making an inspection of a beaver dam. They were walking single file across a stretch of aspen trees and bracken fern. Fish Warden Close stepped over a large log that blocked his way. A few seconds later, Game Protector Erickson stepped over the same log.

"MONTE, I'VE BEEN BITTEN. RATTLESNAKES! TWO OF THEM."

It was Erickson yelling to his companion.

"You're kidding," answered Close as he turned and stepped back toward his companion.

"No, Monte! There they are! Get 'em!" cried the game protector, pointing to the side of the log over which he had just stepped.

The fish warden whipped a revolver from its holster. Under the log was one snake, still coiled. Stretched beside the log was the other one. They were ugly and big, both black timber rattlesnakes. Two shots killed them.

Erickson was sucking blood from the third finger of his right hand. One reptile had torn two gashes as its fangs ripped this finger. The second rattler had left two neat holes in Erickson's index finger, clearly indicating the entrance of its fangs through the flesh.

The game protector had a snake-bite kit with him. Close took it.

"Well, Norm shall I do the cutting or do you want to do it yourself?" he asked the stricken man, offering him a razor blade.

"I'll do it," Erickson answered. "You get ready to put on the tourniquet."

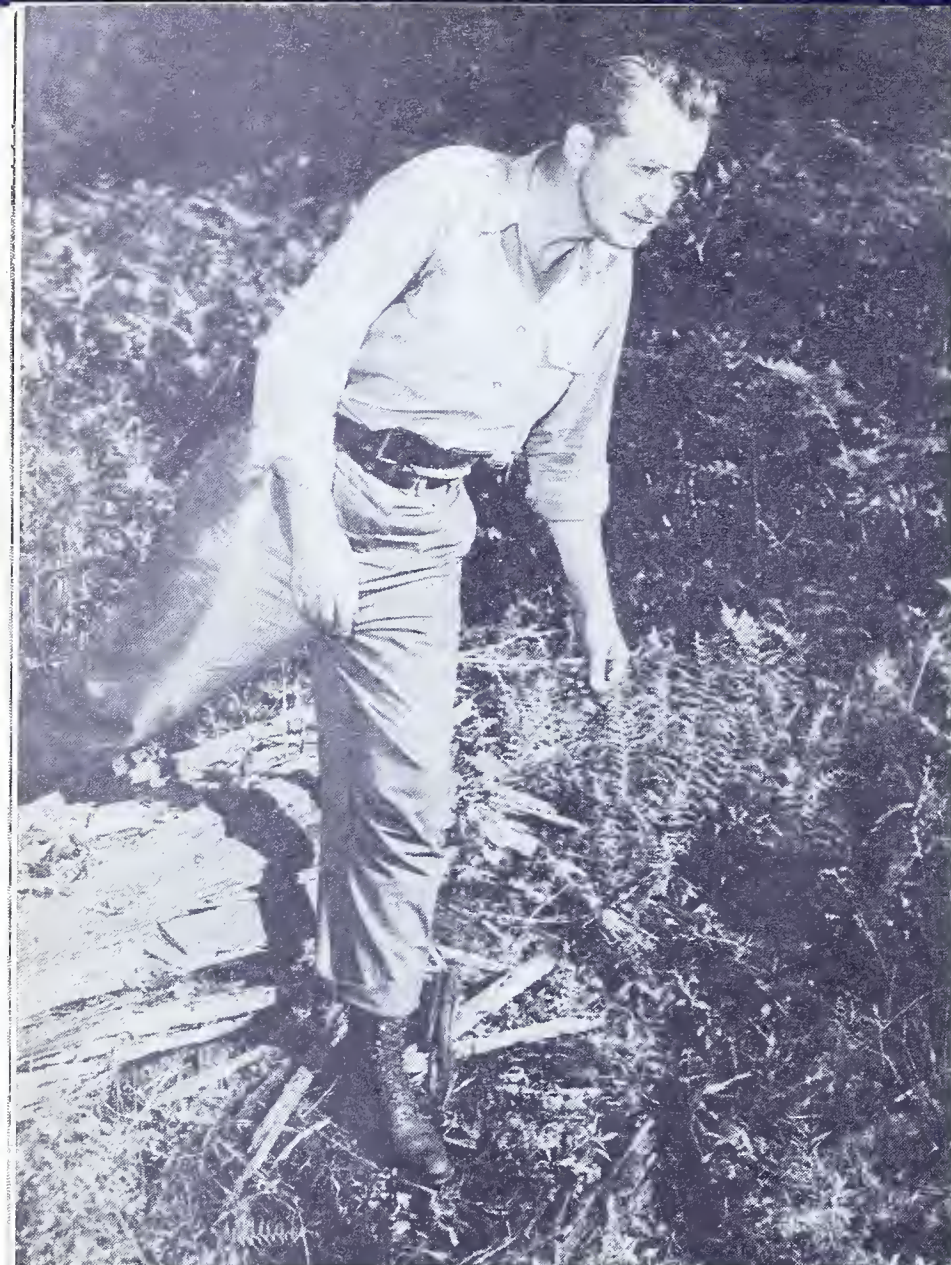
Norman Erickson then performed an operation that required courage. He cut the letter X on the swelling fingers and knuckles of his hand. A suction cup was applied to the index finger successfully, but it was too small to cover the gashes on the third finger. The second cup in the kit was too large. From this wound, Erickson continued to suck blood and venom.

"Well, Monte, I guess I had it coming to me," Erickson declared as Close adjusted the rubber tourniquet at the wrist. "I've killed a lot of rattlesnakes in my time and I suppose this had to happen someday," he added.

"Yea, but you don't have to pick on two at a time," Monte Close reminded him.

The men were calm as they started the two mile hike through the brush back to the car, which was parked at the end of a log trail three miles from the nearest highway. At least, Erickson was calm. Close confessed later to considerable worry as he walked with his companion through the mountain wilderness. Both engaged in considerable bantering and wise-cracking, however.

"Don't worry, Norm, I knew a man once who was



Fish Warden Lamonte Close, six feet three inches tall and long-legged, stepped with ease over the log which hid the two rattlesnakes.



Erickson, left, and Close leave their Model A Ford at the end of a log road as they take off on foot to inspect a beaver dam on Brigger Run.

Following Close, Game Protector Norman Erickson, five feet nine inches tall and short-legged, dropped his right hand to the ground as he crossed the same log. The hand made an easy target for the two rattlers under the log.



bitten by a rattlesnake and he lived almost three months," Close declared.

The third finger, apparently the worst of the two, had started to swell almost instantly. It burned and smarted. Then it began to feel numb. The numbness spread to Erickson's arm. Then to his entire body.

"Monte, is my face swollen?" the game protector asked.

"No, why?" came the reply.

"I don't have any feeling in it. My vision's a little blurred, too," Erickson confessed. "If I faint, don't worry about me. I'll come out of it OK," Norm assured his friend.

But Monte Close did worry. Plenty. He confessed later that he wondered how well he could handle a 180-pound man alone in a mountain with the temperature well over 90 degrees.

Erickson walked every step of the way to the car. His hand had started to throb with pain. The swelling had extended from the fingers to the hand. At regular intervals, the men stopped to release the tourniquet for a short time, and then to tighten it again.

"How do you feel, Norm?" Close asked as he worked with the tourniquet and Erickson rested against a tree.

"OK, I guess," the game protector answered, not quite sure.

"Well, don't worry old pal, I'll never let you suffer as long as there is one bullet left in my gun."

Monte's humor relieved the tension. He was putting on a good act, but at the time, neither man fully realized the seriousness of the situation. They even discussed coming back a week later, "when Norm was well again," to kill all the blankety-blank rattlesnakes in the area.

The walk to the car seemed more like 100 miles than 2 miles. Both men are old-timers in the mountain country. They knew full well that excitement, strenuous exercise, delay and the intense heat of the afternoon all worked against the ravages of a rattlesnake bite. And here was a man with two bites!

After they reached the car, Close was afraid to drive too fast over the treacherous mountain trail. Any accident would result in more delay. And more delay might prove fatal.

At Pat Geelan's farm, six miles from Emporium, Close phoned Dr. George Dorman. When they arrived in town, the doctor was waiting.

Anti-venom was injected into the right hand and arm. An ambulance waited outside of the office. And over

Re-enacting the accident, Erickson shows how he sucked blood and venom from his third finger while Close applied the rubber tourniquet to his wrist.

Erickson's feeble protests, the game protector was roared out of town and into St. Mary's hospital 20 miles away.

The swelling had passed the tourniquet by the time the men had reached the doctor's office.

"Even then it was swollen so much that I thought the skin on his hand would break," Close declared. "But if I thought it was swollen then, I certainly received a shock when I saw Norm's arm in the hospital that night. I swear that his hand was 10 times normal size. His arm looked like a big balloon. Black blood blisters puffed over his fingers. I never saw such a terrible sight in my life," the warden stated.

The next few days were critical. The pain became worse and worse. It reached a peak on the fourth day. By the tenth day, it had subsided and the swelling had started to go down. On the thirteenth day, Erickson was permitted to leave the hospital.

At home he recovered rapidly and was able to be out within another week.

"Were you afraid to go in the woods when you first got out?" I asked.

"Well, I was afraid that I was going to be afraid," the game protector confessed to me. "It bothered me a great deal. I kept wondering what I would do when I met up with a rattlesnake.

"The thing was on my mind so much that one day I decided to have it out," Erickson continued. "I went alone to a stumpy field along Hick's Run. I knew I would find a rattler there. And I did. When I saw that thing coiled six feet away from me, my heart began to pound. I felt nervous. But I was determined to see it through right there. I pulled my gun and killed it."

"Since then I have killed many more and they don't bother me at all now. You see, it meant doing it that way or it meant my job. A man can't be a game protector in Cameron County and be afraid of rattlesnakes," he assured me.

Erickson tells a rattlesnake what he thinks of the entire rattlesnake family since two members of the tribe bit him on the right hand. Erickson's comments are censored.

A good snake bite kit is a necessity in rattler country. It should contain antiseptic, a razor blade or sharp knife for making incisions, a suction cup and a tourniquet.





The Ross Leffler School of Conservation near Brockway.

THE MAKING OF A GAME PROTECTOR

HAVE you met your District Game Protector? Do you know what duties he is required to perform? Have you ever wondered where he gets the training and education to equip him for his numerous assignments?

If you have not met him we hope that some day you will have that opportunity, under favorable circumstances of course. He is a friendly, tolerant and cooperative fellow who has your recreational and moral interests very much at heart. We believe you will like him and the cause for which he stands.

His duties are manifold but, principally, they include the management of game lands with special emphasis on food and cover for wildlife; enforcement of the Game Law; control of predators; game restoration and protection; conservation education and the essentially important contacts or public relations which are so necessary to the success of these programs.

To acquire the proper personality to inspire confidence and cooperation, and to gain the over-all knowledge that will enable him to discharge ably his many duties, the Game Protector must be rigidly trained and well schooled. In these days of modern conservation methods, you do not just hire a Game Protector. You *make* him—make him so that he will perform smoothly and efficiently but with enough case hardening to conduct fearlessly the unpleasant tasks which are part of his profession.

In Pennsylvania the potential Game Protector must go to school to attain this degree of usefulness. He must spend one whole year at the Ross Leffler School of Conservation near Brockway, Jefferson County, named in honor of the present Chairman of the Game Commission, the man who helped most to establish this first institution of its kind in the United States. The Commission always held in-service training for its field officers, but as time went on, it decided it needed pre-service as well as in-service instruction.

How does one acquire this pre-service training? Ask any one of the twenty-five successful student officers in the accompanying photograph, which portrays the Sixth Student Officer Training Class which was officially enrolled April 30 and began its twelve-month classroom and field training on May 1. The ordeals of physical, written and oral examinations are still plenty fresh in all their minds.

The class roster follows: Arthur T. Biondi, Force; James W. Clouser, Mechanicsburg; Donald L. Croft, Greencastle; Dean M. Crooks, Somerset; Donald G. Day, Washington; Michael Evancho, Freeland; Dale O. Fisher, Williamsport; Keith C. Hinman, Galtion; Charles F. Keiper, Duryea; Marion E. Kelly, Slippery Rock; Charles M. Laird, Bellwood; Joseph M. Maholtz, Penfield; John R. Mullen, Jr., Charleroi; Robert H. Myers, Haw-

thorne; Elder E. Ramsey, Altoona; Thomas Rechichar, Monessen; Richard R. Roth, Greenville; Fred H. Servé, Jr., Clarion; William H. Shaffer, Hyndman; William E. Shaver, Harrisburg; Robert H. Sphar, New Brighton; Blair W. Thomas, Jersey Shore; Irwin A. Weibel, Jr., Meadville; Harold W. Wiggins, Newtown; and Louis C. Zlobec, Brockway.

These men were among hundreds of persons from all walks of life who responded to the public announcement that a Student Class would be enrolled in 1950. The fact that the course has generally become known for its intensiveness or, as some previous graduates have termed it, "toughness," did not put the damper on the number of inquiries. If anything, it encouraged them.

To prove it, brochures telling about the school and the qualifications necessary to gain admission were sent to 1792 persons. Of this number 683 indicated a desire to compete in the physical, written and oral examinations and applications were mailed to them.

When they were returned and carefully screened, it was learned that 334 of them were eligible for further consideration. All of these candidates were invited to come to Harrisburg to take the written examination on March 15. Of that number 293 participated and 64 passed with a rating of 70% or better. They were subsequently recalled for an oral interview and further physical examination on April 12 and 13.

These twenty-five enrollees had the highest grades when the keen competition and careful selection was over. We wish them God-speed in their newly chosen profession of a Pennsylvania Game Protector.

During the year they will receive board, lodging and pay and when they graduate they will be full-fledged officers serving on probation the first year in the field. Their salary will increase on an earned annual increment basis and each will have equal opportunity to win promotions, all of which are made from the ranks.

Other states have liked our method so much that they have adopted similar educational programs, or have sent their men to Pennsylvania's school. More than half the present field staff is made up of Conservation School graduates—so, when you meet the Game Protector today, you meet a sincere and earnest man who has sacrificed, studied, and worked hard to fit himself for his job. He is intensely interested in his work or he would not have gone to school to study it.

As you look at their pictures, study each face and remember that a year from now these men will be looking to you for your support, cooperation and a friendly word, because they will then begin to serve you, literally 24 hours a day. Actually they will not be working every minute of that time, but they will be subject to call nonetheless. Following is an example of what the average Game Protector is likely to go through in a day. It is typical and not in the least exaggerated. We hope the little narrative will influence you to appreciate him more.

I'd just about hit the sack—I'd been working late on some reports—when the telephone rang, angrily it always seems to me. As I cradled it after the conversation, my wife sleepily asked what the trouble was. I told her someone hit a deer with a car down at the cross forks, breaking all four of its legs, and I had to go down and put it out of its misery. It was after one-thirty before I had the car rolling toward the all night coffee house near the forks and nearly four by the time I'd humanely killed, cleaned and hung that deer in the garage. Tomorrow I'd take it to the County Home.

Wasn't much sleep in me after that and I was astir at seven—about an hour later than usual. I figured on finishing up my reports soon as I got back from giving the High School kids a little talk at their nine o'clock Assembly. Well, I could add the deer tragedy to the other things that I was going to tell them about. Between breakfast and the time I was due at the school, two local fellows came in with



A written examination was given to 293 applicants at Harrisburg on March 15.

some weasels to probate for bounty, then just as I was leaving the house, Myrna hollered out the door that the express office called and said that a big shipment of rabbits just arrived and when could I pick them up. I told her to get hold of the local sportsman's club secretary and a couple of my deputies and alert them for right after lunch.

The Assembly meeting went off O.K. but I got more than I bargained for—there were *two* of them which took all of two hours since I had a motion picture film to illustrate part of my talk.

When I got home and finished looking over the mail, it was time for chow. At one o'clock the club secretary, some of the members, and two of my deputies arrived and we went to the express office and picked up those bunnies and headed for the depleted sections I had previously charted on my game distribution map.

We're just clearing town when Bill Tate runs out of his gas station and flags us down. He tells me the Missus called to head me off and tell me if I

(Continued on Page 29)

The Sixth Student Officer Training Class. First row, left to right: James W. Clouser, Dale O. Fisher, Thomas Richichar, Charles F. Keiper, Arthur T. Biondi, Dean M. Crooks, Fred H. Servey, Charles M. Laird. Second row, left to right: Louis C. Zlobec, Donald G. Day, Elder D. Ramsey, Donald L. Croft, Marion E. Kelly, Keith C. Hinman, Harold W. Wiggins, William E. Shaver, Blair W. Thomas. Third row, left to right: Michael Evancho, Robert H. Myers, Joseph M. Maholtz, Irwin A. Weibel, Jr., William H. Shaffer, Robert H. Sphar, John R. Mullen, Jr., Richard R. Roth.



Ground Floor Apartments

By JACOB BATES ABBOTT



If you were lying, newly-born, on the floor of a room in some zoo, and if all the cages holding the lions, tigers, pythons, rattlesnakes, elephants and gorillas were open, allowing their inmates to roam at will, including, of course, your room, you would experience a few of the hazards that the young of ground-nesting birds face after they have pecked their way out of the shell.

All the upland game birds and most of the shore birds nest on the ground. Since this article deals only with game birds, I will only list (at the end of the story) some of the commoner ground nesters found in Pennsylvania. Some are cleverly concealed, some most openly exposed in a shallow hollow in the sand, but all so remarkably camouflaged that, if the sitting bird is absent, the mottled and speckled eggs are often destroyed by wandering feet directed by eyes that have no difficulty in identifying a blonde a block away.

Upland game birds, shore birds and waterfowl are precocial, which is the adjective applied to the bright youngsters of the bird world in the same sense that "precocious" is used to describe the infant prodigies of humans. As soon as young grouse and pheasants are dry, after emerging from the shell, they are able to run around and forage for themselves. Precocial is right! How precocious would we consider a two-hour-old human baby who was able to climb out of his crib and stroll to the corner drug store for an ice cream cone?

One of the excitements of hunting for ground nests is the explosive behavior of the sitting bird. A whirring bomb bursts from under your feet when you approach the local boundaries of the front yard of a brooding grouse, black duck or willet.

The wide salt marshes of southern New Jersey, fringing the waters of Delaware Bay, are a waving expanse of green and yellow, shimmering in the May morning haze. The air is alive with the shrill calls of the willets, for here these big grey, black and white shore birds nest by the hundreds. Virginia and clapper rails are their neighbors, hiding their bountiful clutches of eggs in domed recesses in the thick tufts of rank grass that border the tiny canals, estuaries and pools that thread and pockmark the great marsh. Black ducks are sitting on their down-encircled, muddy-colored eggs, deep in the tall saw grass. Marsh hawks and ospreys skim the grassy flats and wheel in the cloud-studded blue. Seaside sparrows bubble and chatter from clumps of bayberry and groundsel and the long- and short-billed marsh wrens rattle away from their swaying perches in the reeds, where their melon-shaped nests are hidden. The marsh literally teems with life and the heat waves rise from the baking vegetation, vibrating the distant islands and hammocks into a dancing mirage or a badly-focused travelogue on television.

Willetts lay their eggs in a shallow depression in the earth at the roots of fine, two-foot marsh grass, goldenrod or groundsel clumps or under beach plum or bayberry bushes. Four eggs usually complete the set.

JACOB
BATES
ABBOTT

They are cream-colored, blotched, streaked and dotted with black, sepia, lavender and terra cotta. There is no secret about it when you do happen on a nest, for the sitting bird explodes out of the tall grass with a staccato "Pee-willeeee!" and much-violent flapping of black and white wings. Except for Nova Scotia and Prince Edward Island, New Jersey represents the northern limit of the willets' breeding range. Strangely enough, no willets have been found nesting along the hundreds of miles of coastline separating these points.

That slender, doe-eyed bird of the open fields and pastures, so nearly exterminated by the market hunters in the 80's and 90's, that bird that is not a plover at all, but a sandpiper—it's the upland plover that I am talking about—now nests locally but erratically in suitable situations throughout Pennsylvania. My son, Capt. Jackson Abbott, (who made the illustration of the upland plover for this article) and I have found them nesting in May in a 20-acre pasture of lush grass, clover and mustard, adjoining the field of a suburban airport. Bobolinks, red wings and meadowlarks were nesting in the same meadow. Four cone-shaped eggs, large for the size of the mother plover, and beautifully mottled and scrawled with browns, greys and purples, are laid in the merest hollow at the base of a grass or clover plant. Upland plover are noisy on their nesting grounds and their rolling, whistled, "Quitty-quit-quit-it-it!" played a minor obligato to the roar of the planes from the adjoining airfield.

Our State bird, the ruffed grouse, hides her nest in wooded solitudes, usually at the roots of some forest tree. The nest of dried leaves is often circled with one or two dead twigs and is mighty hard to find unless the sitting bird is flushed. Eight to twelve creamy-brown eggs (the color found in a cup of coffee into which an extra amount of milk has been stirred) constitute the hen grouse's customary contribution for the survival of the species. The loveliest grouse nest I ever saw was surrounded by pink lady slippers, at the base of a towering spruce, in the New Hampshire mountains.

That bird of mystery, the woodcock, moves into her ground floor apartment early in the season, generally choosing the damp floor of a willow or alder run. The incubating bird sits very close and offers one of the most remarkable examples of living camouflage to be found in wildlife. I once sat within six feet of a brooding woodcock in a New Hampshire alder swamp, making a color sketch of the home life of this bug-eyed snipe. Melting snow surrounded the nest (it was May 2, but it had snowed the night before) and dripped impartially on my paper and me from the alders overhead. I was there three quarters of an hour, but during this time that little expectant mother, that placid little princess of the bog did not so much as blink one of her big black eyes.

Wild turkeys, probably our Commonwealth's least-observed nesters, lay their big, speckled, creamy eggs, sunken among the dried leaves on the ground, screened by a thicket of laurel or otherwise concealed as much as possible from the prying eyes of marauding crows. A dozen to eighteen eggs

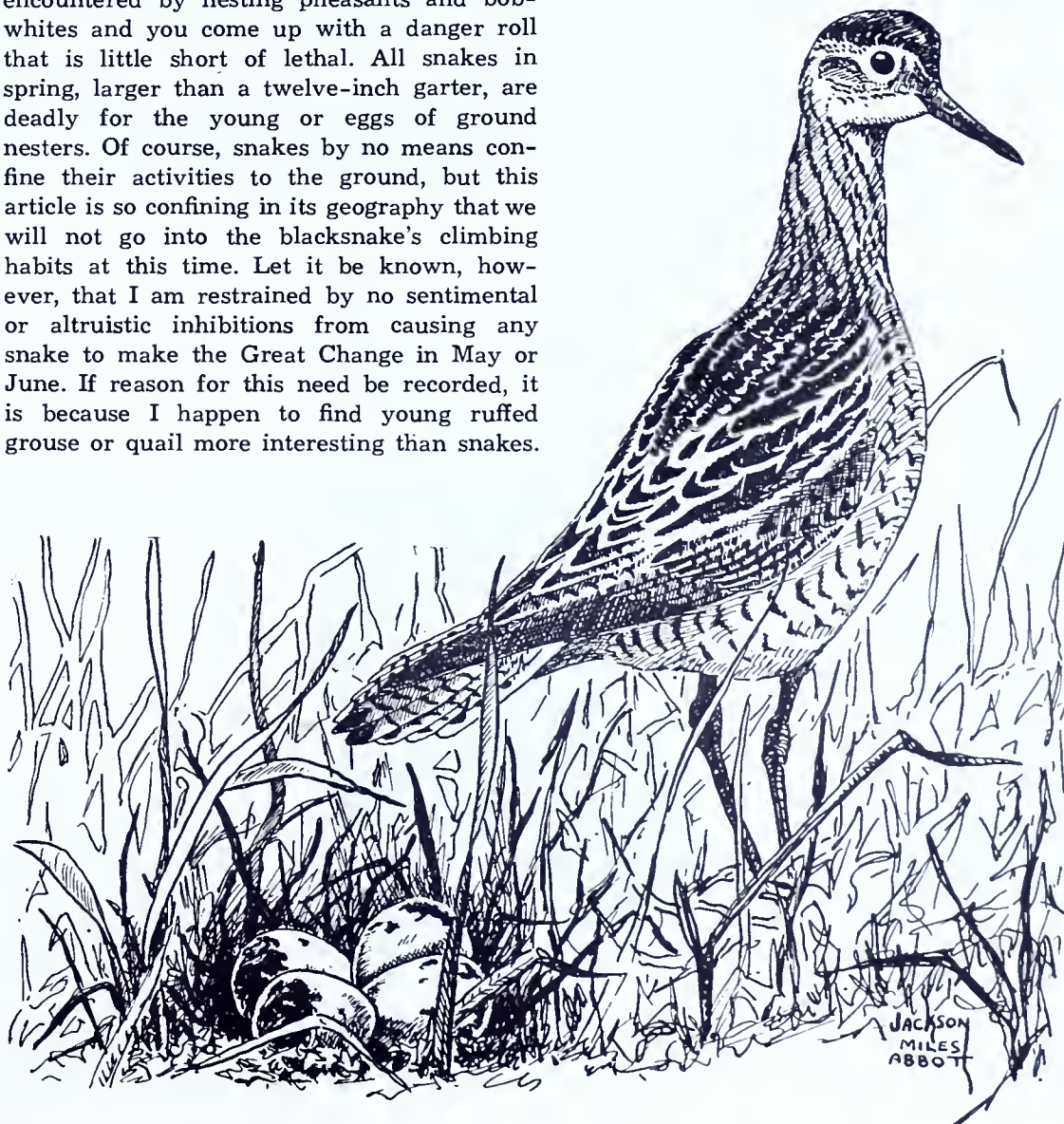
may be in the set. Late May is turkey nesting time here.

Concealing coloration is the principal protection given to the ground nesters. The eggs are blotched and mottled to blend perfectly with the lights and shadows of ground vegetation. The plumages of the majority of upland game and shore birds, with their general color schemes of mottled, broken and emarginated browns, buffs, creams, greys and blacks, are living illustrations of Nature's perfected art of concealment. You can be within three feet of a nesting grouse or woodcock and be totally unaware of its presence. I have stood within a pace of an arctic tern's "nest", that contained four eggs, and puzzled for minutes before my eyes could distinguish the speckled ovals from the surrounding beach pebbles. I knew exactly where they were, too, because I had discovered the nest a few minutes before. A killdeer's set of eggs in a gravelly patch of ground is equally difficult to recognize.

Enemies of ground-nesting birds are legion and, I suppose, 25 per cent of the young raised to maturity would not be too pessimistic an average. Wise nature gave many of them (particularly the gallinaceous birds and waterfowl) large sets of eggs to lay annually. Let's just look at some of the hazards against which the young grouse or quail has to hold the fort: Cats, dogs, rats, skunks, raccoons, 'possums, foxes, ground squirrels, weasels, and snakes would be a fairly comprehensive list to start with. And you will notice that none of these are very uncommon creatures. Add men's mowing machines to the perils encountered by nesting pheasants and bobwhites and you come up with a danger roll that is little short of lethal. All snakes in spring, larger than a twelve-inch garter, are deadly for the young or eggs of ground nesters. Of course, snakes by no means confine their activities to the ground, but this article is so confining in its geography that we will not go into the blacksnake's climbing habits at this time. Let it be known, however, that I am restrained by no sentimental or altruistic inhibitions from causing any snake to make the Great Change in May or June. If reason for this need be recorded, it is because I happen to find young ruffed grouse or quail more interesting than snakes.

Ground-Nesting Birds of Pennsylvania:

Mallard
Black Duck
Pintail
Canada Goose
Virginia Rail
Clapper Rail
Sora Rail
Woodcock
Spotted Sandpiper
Killdeer
Florida Gallinule
Upland Plover
Bobwhite
Ringnecked Pheasant
Ruffed Grouse
Wild Turkey
Turkey Vulture
Marsh Hawk
Duck Hawk
Kingfisher (burrow)
Nighthawk
Whippoorwill
Bobolink
Meadowlark
Song Sparrow (sometimes)
Field Sparrow (usually)
Vesper Sparrow
Grasshopper Sparrow
Henslow's Sparrow
Swamp Sparrow
Towhee
Bank Swallow (burrow)
Rough-winged Swallow (burrow)
Black & White Warbler
Worm-eating Warbler





License fees paid for hunting privileges are deposited in the State Treasury in a separate fund—the "Game Fund."

Some Interesting Facts About Your Game Commission

Pennsylvania's Standing

MUCH has been said and written about Pennsylvania's wildlife program and accomplishments. In the words of a wise philosopher, an institution is the lengthened shadow of a man. Pennsylvania sportsmen will be forever in the debt of the small group of stalwart men who more than fifty years ago recognized the needs for conservation and restoration of our wildlife resources and had the courage to take aggressive steps to make their dreams come true.

The history of the Pennsylvania Game Commission reveals constructive steps forward year after year in its pioneering effort to battle extinction of many species of wildlife, along with a determined and uphill effort to attain many objectives that have long been accepted as essential to any sound wildlife program. The organization, its method of selection and training its personnel, the guarantee of tenure in office, the recognition of meritorious service, the policy of promotion within the ranks, the prohibition of political activity of any kind, as well as the interest, sincerity and loyalty of its employees places it on a plane that has long been recognized as the foremost wildlife agency. This leadership has been achieved through the

adoption and use of good common sense, business methods by Commissioners who accepted their duty and obligation and could not be swayed from what they believed to be right.

Budgeting Funds

Do our readers know that the license fees paid for hunting privileges are deposited in the State Treasury and placed in a separate fund known as "The Game Fund" and can be used only for the payment of expenses in connection with the operations of the Game Commission's wildlife conservation program? However, it may come as a surprise to many sportsmen to know that their Commission is required by law to submit a budget every even numbered year to the Budget Secretary of the Commonwealth.

The submission of the Game Fund budget to the Budget Secretary does not complete the established practice. The usual checking procedure is next in order. The Budget Secretary, as in the case of budget requests submitted by Departments operating from the General Fund, has power to make inquiries and investigations as to the financial needs, expenditures, estimates of revenue, etc., and either approve, disapprove, or alter the estimate. The Budget Secretary having

discharged the responsibilities of his office, submits the Game Fund budget request to the Governor who uses it as the estimate of needs for the next biennium. The Governor then submits it to the General Assembly, and thus it becomes information for the legislators and the general public.

Another control is established in that the Budget Secretary also requires the Game Commission to submit a detailed estimate for each six-month period and controls of actual expenditures are maintained within the budgeted amounts.

The final and absolute control is vested in the Auditor General of the Commonwealth as he is not permitted by law to approve any bills to be paid out of the Game Fund in excess of the budget approved by the Governor, notice of which is given to the Auditor General.

The budgetary control referred to is extremely important, but other safeguards are thrown around the Game Fund to assure its legal and proper use. They are as follows:

(a) Vigilance on the part of Game Commission in the expenditure of the funds entrusted to its care.

(b) Checking of all bills by the Auditor General and State Treasurer to determine their legality and reasonableness before any money is disbursed from the Game Fund.

(c) In addition to the checking by the Auditor General as referred to above, he is by law required to make at least one audit each year of the affairs of the Commission.

The above-mentioned facts are given so that the sportsmen and general public may know that the affairs of the Game Commission are being administered in a businesslike manner, and that nothing is left undone to protect the Game Fund at all times.

Why is a Large Cash Balance Necessary?

One of the many questions brought to our attention is "Why is it necessary to have available in the Game Fund a cash balance of almost a million dollars at the beginning of each fiscal or operating year?" The question is reasonable and easy to answer. Certainly the sportsmen want their Commission to manage their affairs so that all bills can be paid when due. This cannot be done unless the balance indicated is on hand at the beginning of the fiscal year. During the months of June, July, August and September of each year the work of the Commission continues but that is a very lean period for receipts and the bills to be paid exceed the money collected by almost a million dollars. In other words, the bills due during these four months are almost \$1,000,000 more than the money received during the same period. So instead of using all the revenue available in each fiscal year, sufficient money must always be saved to pay the bills during the lean period of receipts, or until the money from the sale of new licenses becomes available about October first and thereafter. This needed balance operates similar to a revolving fund in that approximately the same amount is required at the same time year after year.

From the fact that the bulk of the operating expenses during the early part of each budget year must be paid from the June 1st balance,

(Continued on Page 30)



OUTDOOR KIDS

By HAL H. HARRISON

ONE Saturday morning in early June, when the mountain laurel was in full bloom on Pennsylvania's hill-sides, Billy and Jane had the thrill of their lives. They found a beautiful little fawn deer.

When they spied it, the youngster was lying so still beneath a laurel bush. His head was held low and one might have thought it was sound asleep except that those bright little eyes watched every move the children made.

The deer was not easy to see either. The brown coat interrupted with spots like splashes of sunlight filtering through the laurel, made him very much like his surroundings. Less sharp eyes than those of Billy and Jane would have never picked him out in his bed on the floor of the forest.

Jane's first impulse, unfortunately, was much the same as the reactions of thousands of well-meaning persons all over the country every summer.

"Oh, Billy, let's take him home. Let's keep him. He's so cute," was the way she put it.



Billy was more woods-wise than Jane, thank goodness. He knew that to take the little deer away from the woods was the worst thing they could do. He knew that it was not lost; that it did not need Jane's help; and he also knew

(Continued on Page 31)

WHY NOT TRY GUNSTOCK CHECKING ?

BY E. STANLEY SMITH

DO YOU own a rifle or shotgun with a plain stock and forearm that you feel would be improved by a bit of checking? If so, why not tackle this job yourself? Few phases of the gunsmithing art offer more gratifying results in return for the small expenditure of time and money. The necessary tools can be purchased for a few dollars or even made by the amateur gunsmith himself, and, while the task is painstaking and requires a certain amount of practice, it calls for no special skill or talent. The average gun crank with plenty of practice and the usual amount of patience and good judgment can turn out a creditable piece of checking on his first try.

Because of its neat appearance and slip-proof character checking is considered the ideal form of embellishment for the modern firearm, and its execution is an enjoyable hobby for the gun-lover.

Numerous gunsmith supply houses, sporting goods dealers and tool manufacturers sell excellent checking tools for as little as a few dollars per set. However, for the benefit of the many craftsmen who derive as much pleasure out of making their own tools as from actually doing the work, the construction of these tools will be described.

The first consideration is the size checking desired. For the beginner 18 or 20 lines to the inch is the finest that should be attempted, although in hard, close grained wood lines as fine as 32 to the inch have been executed by expert checkers.

Three types of tools are used—the line spacer, which lays out the lines; the V-tool that deepens them; and the border tool that forms a decorative border around the checked panel.

Suppose you've decided to really go overboard and fashion your own tools. Splendid! It will be excellent experience for any aspiring gunsmith.

These tools are all forged from 7/32 inch carbon drill rod.

"Forged!!" you gasp, "Isn't that what blacksmiths do?"

Yes, that's what blacksmiths do, but you won't need a spreading chestnut tree or any other such imposing props for this job, although those of you who have access to a small forge and anvil will find they are perfect for this job. Any stove, furnace or other source of heat that will raise the temperature of steel of this size to a bright red, will suffice and any sizeable piece of steel will serve as an anvil.

The first step is to cut off a 4½ inch length of drill rod. One end of this piece is heated to a bright cherry red and the terminal ½ inch or so flattened by hammer

blows until about ⅛ inch thick. It is then reheated and this end bent at an angle of about 110 degrees to the shank (fig. 1). Now taper the other end by forging or grinding to form a tang. Be careful not to allow the steel to cool below a cherry red color while forging or cracks are likely to develop. Assuming this blacksmithing venture was successful the blank should be annealed or softened by heating to a bright cherry red and cooling gradually, preferably while buried in lime to retard cooling. Then dress off the cutting end to remove all scale and prepare it for the forming of teeth. Make up lots of these blanks to allow for spoilage and for the later addition of different sized tools to your collection.

Let's make a line spacer first. Select a blank with the widest cutting edge and with a three-square needle file cut a groove nearly 1/16th inch wide down its center. Then with a flat file bevel the outer edges to the same angle (thirty degrees on the side) producing two parallel, sharp-edged ridges. These are formed into two rows of teeth by filing grooves across them with the three-square file. To cut with the greatest of ease these should be spaced a trifle less than 1/16th inch apart, slanted a bit, as shown in fig. 1, and shaped up to a perfect point—a job that calls for clean bifocals and plenty of light. If all this painstaking work leaves your nerves as raw as a poolroom joke you'd better drop the whole thing before it's too late. It gets worse all the time.

Now we'll make a V-tool. As this is a single-edged tool we'll use one of those thin blanks you thought you had ruined by applying too much muscle to the hammer handle. File both sides of the cutting end to a 30 degree angle and cut teeth on both sides with a three-square file. Note that the teeth are made as fine as possible and are cut parallel to the slope of the sides instead of squarely across the tool as in the case of the line spacer. These teeth are also given a slight rake, or slant, but this should not be overdone as it will cause the tool to jump and tear, particularly in softer grades of walnut.

Border tools come in a great variety of shapes, from the simpler types to the wide, intricate affairs used on some English guns that cause the checking to appear surrounded by picture frame moulding. Being used primarily for the purpose of covering mistakes the wider types should be avoided because of the implication that huge blunders call for equally huge fixer-uppers.

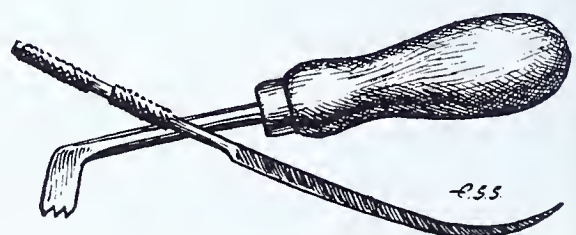
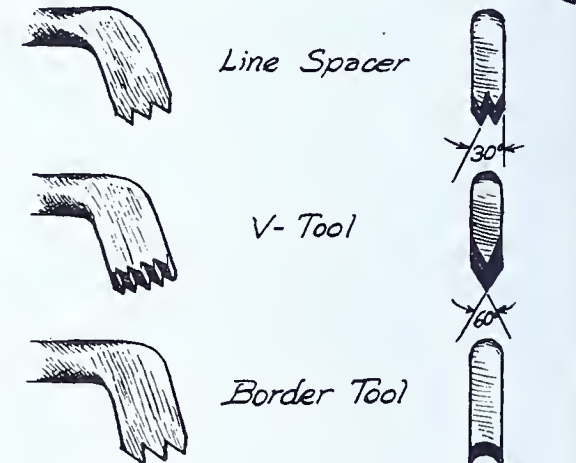
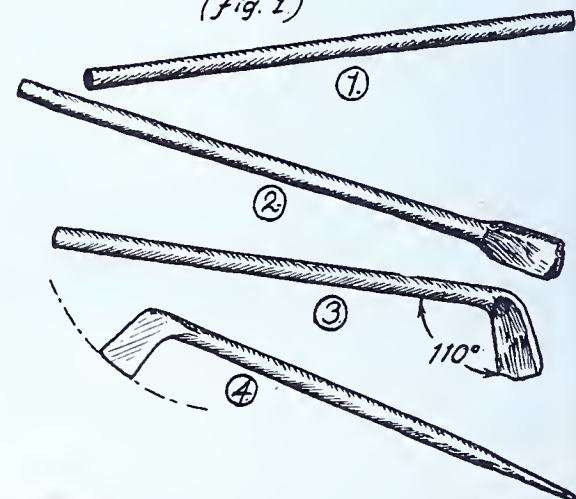
To make the type shown simply give the cutting end a concave cross-section by the use of a small round file and cut teeth in

this edge as with the line spacer, except that these should be slightly deeper than the center groove.

The cutting ends of all tools are hardened by heating to a dull red and immediately plunging into a container of water. If properly done this should render the steel so hard that a file will not scratch it. If not, it should be reheated to a slightly higher temperature and quenched as before. Overheating should be guarded against, however, as this causes the steel to crack. After hardening the tangs are driven into file handles, the teeth touched up with a triangular hone and they are ready for use.

A bent three-square needle file is used to smooth the checking. This tool is curved by coating the file with a paste made from bone-black and oil, heating it to a cherry red and bending it to the desired shape by pressing the tip against a block of wood. Then it is rehardened by applying another coat of bone-black, heating to a dull red and quenching in a solution of 1 quart of water and one heaping tablespoonful of salt. After several trials you will probably discover that the slender file doesn't retain sufficient heat until you have time to quench it. Placing everything as close together as possible and

Steps in making Checking Tool Blanks..
(fig. 1)



moving like a twin jet job should eventually crown you with success.

While not indispensable, a checking cradle to hold your work makes the task so much more pleasant that it is well worth your while to build one. The beginner usually doesn't realize he should have one until in the midst of a checking job and half-blind from the spectacle of thousands of tiny diamonds jiggling around with every stroke of the tool. The cradle shown in fig. 3 has been chosen for its simple construction—if checking appeals to you after your first attempt you can then construct a more elaborate machine. This one need not be made of hardwood—any heavy lumber will do. The screws near the top of each upright are tightened to hold the work and locked by means of the two jam nuts. In use the beam is clamped in a vise.

There are countless ways to hold a forearm or stock in the cradle and each piece of work presents an individual problem to be worked out by the gunsmith. The usual method for a bolt action stock is to remove the buttplace and place a block of wood between the butt and the end of the screw or "center" as it is called. The other center is turned against the end of a dowel that has been fastened to the barrel channel with a wood screw. Shotgun forearms can be taped or screwed to strips of wood and these clamped in the cradle. Shotgun stocks are usually padded with wooden blocks fitted to the inletted portions of the breech.

Before starting on a good stock or forearm the beginner should by all means spend as much time as possible practicing on odd scraps of wood. In order to closely simulate an actual checking job the wood should be rounded to correspond with the various parts of the stock and all practice grooves should be scored right up to a line representing the border of a panel. The reason for this latter suggestion should be apparent—it's just as important to know when not to checker as it is to know when to checker—and one of the dad-blamed toughest parts of this job is knowing how to stop when you want to. Don't under-estimate the importance of practice—It's the *only* key to successful checking.

For the first attempt a simple forearm design such as the one in fig. 3a should be chosen. Notice that in this "point" design (fig. 2) wherever possible the border is exactly parallel to the lines of the checking. For this reason not all portions of the outline are definitely established until the entire area is checked.

To lay out the pattern first mark a center line on the forearm with a lead pencil. Then draw a line on either side of the forearm to indicate the straight part of the border that runs along the top edge of the forearm wood. After determining point "a," (a spot on the center line exactly opposite the forward end of the proposed panel) measure along the center line $1\frac{1}{2}$ times the distance between points "b" and "c." This we will call point "d." With the aid of a flexible scale, a strip of celluloid or some other flexible straight-edge draw a line from "b" passing through "d" and continuing to the border. Then do the same between "c" and "d." These two lines are primary layout lines and will de-

termine the angle of all checking lines, the shape of the diamonds and the angle of various parts of the border.

Now the outline of the panel should be roughly drawn with pencil. As no one knows just how the checking will work out, a permanent indication of borders is not advisable.

Examine the forearm that is centered in the cradle. Is it solid as a rock, yet free enough to be turned by hand? That's the way it should be. Test the angle. Is it tilted just right to allow you to use your tools without undue fatigue? How about your light? This should come from a single source and should be placed low and to one side so as to throw deep shadows in the grooves you score, making them clearly visible. Everything set? Then roll up your sleeves and get started.

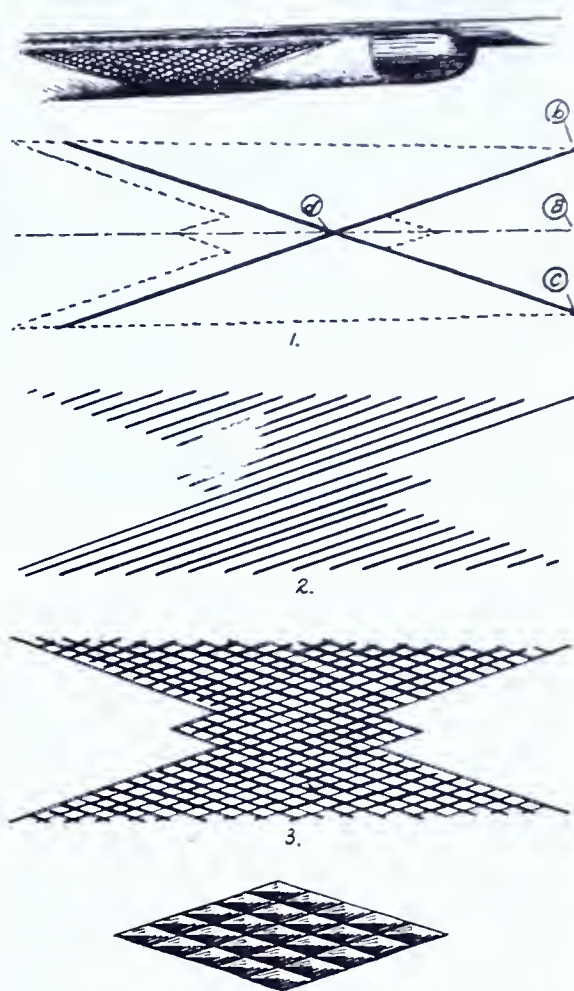
Take the line spacer in your trembling hand and place it with one row of teeth on the "b" and "d" line and the other just inside this line. Now, with the forefinger extended to apply pressure move the tool back and forth as though filing, but keep the spacer in constant contact with the wood. The result should resemble a double groove, reasonably straight and about $\frac{1}{3}$ the tooth depth. Continue this double groove until the opposite border is neared, but stop as soon as you appear in danger of running over the pencil line. That's fine. Next time, though, instead of holding your breath try puffing on your work occasionally to keep it free of dust. You'll find this a great help.

Now return to the starting point and add another groove by allowing one row of teeth to follow the innermost previously cut groove while the other scores a new one. Be sure to keep the tool lined up perfectly and tilted slightly to keep it in the groove; otherwise it may slide out of the guiding groove and wander all over the forearm—leaving permanent tracks wherever it goes. Should the line acquire a bend or kink this must be immediately corrected with the bent needle file before continuing. Cut more grooves in this manner until the pencil outline on one side of the first groove is filled; then finish the other side. Don't worry about incomplete grooves; they'll be finished later. You should be concerned with only three things at the moment. First, keep the grooves as straight and equally spaced as possible; second, don't allow your spacer to over-run the border lines; third, don't score these lines too deeply. When this panel is filled in you will see how these scored grooves have already exactly determined certain parts of the border. Eventually all these angles will be determined in this manner.

With all the "b-d" grooves completed do the same with the cross-lines, starting with the line "c-d," and spacing off the lines from there. Be certain to keep the spacer in perfect alignment when scoring across previously cut grooves, for at this stage of the game the tool is more difficult to control.

On completion of the grooves running in this direction you will see the entire outline of the checking panel determined. If one point is shorter than the corresponding one on the other side of the design merely add a line or two to correct the error. In this manner the design can be bordered in a pro-

Steps in Checking (fig. 2)



fessional manner with all but the lateral parts of the border perfectly parallel with the grooves of the checking.

Theoretically we should have all grooves laid out in their proper place—neatly spaced and not over-running the borders. Now comes the task of deepening them, which is accomplished by following each groove with the V-tool with a stroke similar to that used with the line spacer. Don't go too deep, as that would almost obliterate the previously scored lines and make them hard to follow. Open up the grooves as close to the border as possible. Score out all grooves in both directions, then repeat the procedure as often as necessary to make all the diamonds perfectly sharp.

Now take a sharp pen-knife and score out the unfinished ends of all grooves right up to the border. Incidentally, this, too, should have been diligently practiced before the actual checking took place, as it's quite a trick to make this part match the rest. The needle file is now used to smooth the grooves and the checking is complete.

Now if you were an expert checker you could call the job finished, but until you learn to make those tools behave perfectly you will probably be plagued by those ghastly run-overs that plow up the wood outside the outlines of the panels. That's why you made a border tool. It's your only salvation; let's hope the bloomin' thing is wide enough to cover your hog wallows. Use it in the same manner as the line spacer was used, except that you follow the outline with one row of teeth while the other scores

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While walking down along Tom's Run, below the swimming pool, at the Cook Forest State Park on February 2nd, I flushed a grouse that flew across the road into a pine and hemlock plantation. A short time later, while inspecting the plantation, I again flushed the same grouse. This time it flushed with a startling "whirr" of wings and flew directly into a large bureau mirror that was setting on the back porch of the Cook Homestead. The sudden impact broke the female grouse's neck, killing it instantly. Because the mirror was reflecting the plantation trees, the grouse apparently thought it was flying into another wooded section. Despite the fact that quite a few white worms were found inside the grouse, it appeared to be in excellent condition. Its crop and gizzard were well-filled with seeds and buds from various trees and shrubs, teaberry leaves and pieces of mountain laurel leaves.—Paul R. Beattie, Manager, Cook Forest State Park, Cooksburg.

On March 28 while releasing a box of cock pheasants, one of the birds sailed off towards a nearby creek. The creek was unusually high and muddy but the cockbird, instead of sailing on across the creek, landed right in the middle of it and began swimming. It wasn't very long till he was safely out on the bank. Maybe he felt the need of a bath after being boxed up for awhile.—Game Protector Martin Shaffer, Leroy.



Mr. William S. Pyle of Youngwood, trapping in Westmoreland County on an area of approximately 400 acres during a three month period last winter, took the following: 148 opossums, 109 skunks, 24 weasels, 7 gray foxes, 3 "woods" cats, and 13 crows—a total of 304 animals and birds which might be classified as detrimental to our game birds and animals. Through the sale of the pelts and bounty payment, Mr. Pyle received for his efforts \$198.50 and a great deal of satisfaction in knowing that he did his part to help protect our game.—Conservation Education Assistant Francis E. Jenkins, Ligonier.

On March 3rd, as cold a day as we had in this area all winter, I was patrolling along Mingo Creek and came upon an old woodchuck. This animal was very much alive, seemingly not minding the cold weather at all. He was all covered with mud that seemed to be frozen and was gathering leaves and carrying them into a hole nearby. I watched him for about a half hour and each time I went nearer to the hole while he was inside with his load of leaves. From his appearance, I believe he had been drowned out from a hole someplace else, because he did not seem to gather any more mud while I watched him.—Game Protector Robert V. Rea, Canonsburg.

People have become accustomed to seeing deer along the highways and when the deer are not to be seen there, many come to the conclusion that there are no deer left. In this district many people, noticing the lack of deer along the highways, were convinced that our deer herd had been almost completely wiped out during the past antlerless deer season. This is not the case. The only reason the deer were not seen along the snow banked highways last winter was that there was no food to be found there. However, in late March we had a good thawing period and naturally the snow along the roads was the first to melt. With plenty of snow back in the woods and the food along the roads available, many deer headed for the highways. So once again the road travelers are seeing deer, at times in sizeable groups, and are now convinced there is still a large number of deer in this section.—Game Protector Stephen Kish, Moosic.

Gerald Magee, of Betula, Norwich Township, McKean County, whom I have known for over 40 years and who is perfectly reliable, related to me the following story on Sunday, April 23rd: "On Wednesday I was standing in a well house on the Lasher Brook road when I heard a strange low and pleading or moaning noise below me in the timber. I walked down a ways and there was a full grown bear pawing about the base of a large elm tree. It was making noises which I had never heard before. I watched her from 100 feet away. On glancing to the top of the tree I noticed two very small cubs peering from a hole 60 feet up. As the bear continued her 'calling,' the two cubs backed down the tree very slowly. They then seemed to work about the base of the tree. After ten minutes I called out 'hello, bear,' whereupon the old bear started up the tree taking her cubs behind her and on the way up glancing from right to left to her rear making sure that the cubs were following. All three bears entered the hole about 60 feet up."

On hearing the foregoing the writer and three friends went to the tree that afternoon. Magee had not walked to the base of the tree. We did so and saw where the bear had dragged the carcass of a dead deer more than 200 feet to the base of the tree, this being the purpose for which the bear was calling her cubs down the tree. The elm tree was approximately four feet in diameter at the base and the hole was certainly 60 feet in the air. The bark on the tree was rough and aged and the bear markings made in climbing the tree were very apparent. We dumped a bushel of corn at the base of the tree, figuring that perhaps the bears would return for the balance of the deer carcass if they were not then still in the tree.—Game Commissioner Joseph P. Willson, Smethport.

Late in March several hundred sea gulls could be observed about five miles inland from the Susquehanna River. They could be seen feeding on scraps discarded near Institution grounds, road houses, and the like. I cannot say whether this is unusual, but I have never seen them so far inland before, nor have I seen them so numerous. According to their actions, they were hard pressed for food.—Game Protector Mark Motter, Harrisburg.





On March 31st I spotted an animal climbing an apple tree in an orchard near my home. Unable to recognize it at so great a distance, I decided to investigate. It was a woodchuck which had been flooded out of its home along the Nescopeck Creek and was apparently confused in its new surroundings. I was able to approach within two feet of it for a real close view. The animal did not show its usual fear of human beings.—Game Protector Sam McFarland, Drums.

I had a very unusual experience last July while working along the boundary line of State Game Lands 28 near Hallton. Early in the day I had stopped at a blackberry patch on the Baughman Farm and was busy picking a few berries for future pies. While picking around a heavy growth of briars, I suddenly noticed the yellow and black markings of a sizeable rattlesnake lying high up on the interlaced stems of the blackberries. It was indeed fortunate that he hadn't struck me as I had been picking berries only a few inches from his head. The snake was nearly four feet above the ground and it was evident he intended to try and catch a songbird as these little fellows were very active gathering the ripened berries. Although quite familiar with rattlers, this was the first instance where I ever saw a rattler off the ground and it gave me quite a queer feeling to know for a certainty that the rattler does climb. There has been lots of controversy on the subject and even Audubon, the famous naturalist and artist, was criticized for painting a picture of a rattlesnake raiding a song bird nest high up on some bushes or low shrubs. Common sense tells us that the rattler is not ordinarily a climber, due to his thick, sluggish body, but no one need ever tell me again that a rattler can't climb—I know better.—Game Protector Ted Carlson, Johnsonburg.

On March 28th, while patrolling for dogs running deer, I saw a Cooper's Hawk kill a robin and carry it away. Due to several houses close by I could not shoot the hawk. After it struck the robin, the hawk dropped it and came back to pick it up. I was within 10 feet of the robin when the hawk swooped down and gathered it up.—Game Protector James Latimer, Forty Fort.

Two Tioga boys, Richard Hatfield and Charles Birtch, were hunting owls near the Tioga cemetery when they saw what they thought was a raccoon in a large pine tree. After looking the animal over more closely, however, they realized it was a gray fox hiding in the crotch of a limb about 35 feet from the ground. They shot the fox which dropped to a lower limb and one of the boys started to climb the tree to retrieve it, when they discovered another fox on the limb where they shot the first one. This one was quickly killed too. The animals proved to be a pair of large grays with the female carrying four unborn young. While it is not unusual for gray foxes to climb low trees and fences, I never realized they were capable of climbing to such a height on an upright tree.—Game Protector James Osman, Tioga.

On March 10th while stocking wild turkeys in my district and accompanied by Fish Warden Crobin, we noticed something that jumped out of the little water drainage ditch along the old country road where we were traveling. I stopped the truck and we jumped out to investigate. We immediately flushed a nice, plump woodcock. It seemed odd to us that these little migrants would have returned to the north at that time since it was very cold and the only ground that wasn't frozen solid was in the drainage ditches.—Game Protector Dean Lesnett, Huntingdon.

Mr. Maurer, 2003 Market Street, Camp Hill saw a ringneck hen pheasant setting in a tree in his backyard recently. Upon approaching the bird it made no effort to get away and he walked over and picked it up. It was blind in both eyes. He placed it in a box and called me. I took the bird to the State Lab at Summerdale and upon examination, it was found that the bird was in all probability struck on the head by a passing car. There were hemorrhages in both eyes, which caused the blindness, and it would have died in a few hours. Examination revealed that the bird was in perfect condition other than the head injuries.—Game Protector Clint Ganster, Marysville.

On Sunday, March 26, a group of sportsmen from the Central Sportsmen's Association of New Milford turned out in an earnest manner with cars, jeeps and tools to give some excellent assistance in transporting and erecting on various ponds and lakes in Susquehanna County a number of wood duck nesting boxes. These people like their duck hunting and are more than willing to try to improve it.—Game Protector Howard Hoffman, Susquehanna.



One day in March I was driving through a game lands road on State Game Lands 127 immediately following a heavy snowfall. I had stopped the car to clean some of the snow off the grill when I noticed a rabbit come hopping out of the brush. He ran right down the road ahead of me. Having seen weasels in this spot before, I immediately pulled my shotgun out of the car and had no sooner loaded up than a weasel came out of the brush just ahead of the car and started down the road on the trail of the rabbit. This was a costly mistake for Mr. Weasel and his last one. My observation has been that nothing short of a load of shot will stop these killers when they are in pursuit of game.—Game Protector Victor Shaffer, Thornhurst.

On March 25 I had a call to remove a raccoon at Paradise Union Church. Upon my arrival, I found that a large den tree had been cut down. A raccoon was sitting on one of the branches and a nest of baby squirrels was huddled in the bowl of the stump. I had to remove the raccoon and squirrels because the men had to take the tree away. The squirrels were unable to shift for themselves so I took them home. We are feeding them with a doll bottle and they are doing very well. The squirrels will be released just as soon as they are able to shift alone.—Game Protector Earl Gessaman, York.



PENNY WISE AND POUND FOOLISH

By HENRY KLONOWER

*Executive Director, Conservation Education Laboratory For Teachers,
Harrisburg, Pennsylvania*

AN EFFECTIVE conservation education program is dependent entirely upon an understanding corps of competent teachers in the schools of Pennsylvania. All the textbooks, microscopes, maps, and other aids that make such teaching realistic are effective only to the degree in which teachers understand the overall significance of the conservation program.

The all-inclusive conservation program includes not only the preservation of the material things people now enjoy, but also the intelligent use of mineral resources, farm lands, forest reservations and recreational facilities.

Such understanding use and intelligent preservation of the material things develops from a pattern of human conduct which must be taught in the schools if the larger objectives of the conservation program are to be realized. One generation may correct ruthless waste of mineral resources, or the needless destruction of timber land, or the pollution of streams that eliminate recreational opportunities. But the essential fact is that each succeeding generation must recognize its responsibility for that which was accomplished by sacrifice of money, time, and effort of the far-visioned people of this generation which made all these good things possible.

A conservation program must be based upon the character of the people. The teachers' task is to inculcate such character traits that the moral obligations essential to an effective conservation program are a part of the pattern of the complete education of the child. The FIFTH CONSERVATION EDUCATION LABORATORY FOR TEACHERS is the continuing effort on the part of those who believe that conservation can be taught like any other subject in the curriculum. The Laboratory will have its fifth session at The Pennsylvania State College from July 5, 1950, to July 22, 1950, and July 24, 1950, to August 11, 1950. For the past four years, generous groups have made scholarships available to teachers in the public schools. Each teacher is specially selected because of his or her potential leadership.

The teachers are first recommended by their local superintendent and then awarded a scholarship on the basis of geographical distribution and ability to use the experience effectively on his or her return to the classroom. The teachers spend their mornings and afternoons on field trips, with two all day trips planned for each week. Such phases of conservation education as mineral deposits, mineral utilization, topography, mining, stream use and pollution, forest management, reforestation, nursery practices, forest utili-

zation, soil formation, soil quality, soil use, land utilization, wildlife management, plant succession, game refuges, pond and stream life, fish hatcheries, stream improvement, and community planning will be included.

Evenings will be spent in examining visual aids and literature and in working under the supervision of consultants in elementary and secondary education. Teachers will thus acquire a background for understanding the conservation of natural resources and will formulate definite, detailed plans for bringing a knowledge of conservation practices into their classrooms—not as an additional subject to be taught, but as an enrichment of subjects already in the curriculum.

The Laboratory is a full-time program of study. No other course in the summer sessions may be scheduled concurrently.

Numerous organizations have cooperated in the establishment of the Pennsylvania Conservation Education Laboratory for Teachers. These organizations, through a joint advisory committee of which Mrs. J. Charles Runk, Pittsburgh, Pennsylvania, is chairman, are cooperating with the College. Support for the Laboratory has come from many sources. Various State Departments in Harrisburg and commissions have contributed substantial funds for the support of the Laboratory. Women's clubs and other lay organizations throughout the State have provided scholarships for teachers. The Pennsylvania State Education Association has been generous in providing opportunities for teachers. Corporations interested in conservation have donated scholarships. All in all, there has been a keen interest manifested by all types of interest in the continuing development of the Conservation Education Laboratory for Teachers. The SPORTSMEN'S CLUBS OF PENNSYLVANIA have been one of the most loyal supporters of the experiment and the people of Pennsylvania have reason to be grateful for the help which the Sportsmen's Clubs have given to this movement.

The basic underlying principles of conservation must become the pattern of human conduct if the succeeding generations are to enjoy the heritage which is to be theirs and of which this generation is merely trustee. Intelligent spending on a well planned program of conservation education is not "penny wise and pound foolish."



Mrs. Mildred Sharron, second grade teacher in Harrisburg's Cameron School, is shown here with some of her pupils who are being taught conservation through integration of the subject with other standard subjects in the curriculum. Mrs. Sharron attended the second session of the Conservation Educational Laboratory in 1949 and has applied conservation to such subjects as clay modeling, posters, and nature study.

GUNS AND GUN DOGS



VARMINTS ARE SPORT

By ED SHEARER

THE late spring rays of the sun have chased the chill of a lingering winter from our mountains and valleys. The urge to get out in the open can be denied no longer. Right along with those early birds—the trout fisherman and the robin—will be found that indefatigable but every increasing species, the “varmint shooter.” In fact the more hardy of this species never hibernates. The fact that I am now receiving more queries on varmint rifles indicates that a large number of recruits will take the field this year.

What outfit is best and what will it cost are the two questions most often asked by the beginner. They are difficult questions to answer because of the wide variety of varmint rifles and ammunition and the different requirements of the “varminters.” Some want commercial ammunition at low cost; others don’t mind the expense. Then, too, some plan to reload in order to cut costs. But one and all they won’t be happy until they’re full fledged varminters. They don’t know what they’re letting themselves in for.

Here is a case history of a varminteer I’ve seen many times. He starts on his chosen profession with a light 22 caliber of the garden variety. He soon finds that he runs out of luck at about 50 yards. So he shifts to a heavier match model and works up to near a 100 yards. Now he wants those 150 shots, so the only thing to do is to mount a scope on the rifle. Then, after holding out on the wife, he gets the sight installed and promptly discovers his perfidy has been in vain. He can’t get much on what range he had. Old man trajectory has sneaked up and made a monkey of him. Finally he realizes he must have an outfit suited for the job, an outfit that will cost many greenbacks.

It’s a lamentable fact that the 22 caliber is a pretty sad sack in the role of a vermin rifle. Even with the high speed that its rainbow trajectory makes, hits at much over 100 yards are a gamble. Here is another drawback which is often overlooked. These low velocity 22 caliber bullets are likely to ricochet and go galivantin’ all over the lot. So in a farming country where most varmints hang out, the 22 caliber becomes a dangerous weapon to use. Then, too, it lacks killing power on anything sizeable. On ground hogs, for example, you have to hit them in the chest cavity or you will lose them.

In writing of varmint rifles, this column will not go into the wildcat cartridges. Not that I don’t believe in them. Some of our best cartridges—namely, the 22 Hornet, 220 Swift and 250 Roberts—started life as wildcats. Further, I believe that from the wildcats will come factory rifles of the future that will give us sure hitting ranges with adequate killing power, far in excess of anything we have today. The main reason that I’ll skip them is that the average man doesn’t want to go to the trouble of reloading, getting expensive and scarce shells, bullets, etc., let alone the reloading tools.

We will stick strictly to over-the-counter stuff that Joe Jones can get some fodder for without chasing the family out of the

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REGISTRATION

By HERBERT KENDRICK

DESPITE the fact that enormous sums of money, vast amounts of time and energy have gone into the breeding and development of modern gun dogs, individuals continue to seek an old farm dog that knows his birds. They seem to think that at some time in the past dog men promised, once dogs were registered, each one of the generations to follow would be near perfection. That was not the case at all. It is extremely fortunate that sportsmen are realizing that present game conditions require the work of a more highly specialized dog and the best way to produce such dogs is by careful selective breeding. In order to join the move to improve hunting dogs it is very necessary to buy pedigreed dogs and register the pups of each litter. Thus careful records are kept and correct blood lines are mated to produce the best possible animals.

All pedigreed dogs are not necessarily good dogs—not by the greatest stretch of the imagination. Even from the very best of breeding the percentage of superlative dogs will most likely be small. My most miserable failure in a bird dog came with one whose parents were of noble blood, yet I am certain that my chances are far safer with the pedigrees than with a pup from the bitch, that loafs around the town diner, bred to someone’s something or other.

Many of the great “naturals” of uncertain breeding may have had some fine blood on both sides and the owner is sure that good qualifications will be inherited by the pups. Yet it is extremely difficult to select a mate of assurance. Dog breeders have learned that there are certain dogs that possess the ability to pass along their fine qualities. Careful records permit the proper breeding to such dogs, while the unregistered dog may not be able to reproduce his equal because he may have inherited his best from only one side.

Suppose you have a dog that has proven his excellence. When he was a puppy you neglected to register him. Since several years have passed the papers cannot be located, but now you want to perpetuate his strain. As you select the bitch for your dog you find she is registered and the owner refuses to breed her to an unregistered dog. I have had it happen more than once, and with deep regret.

When acquiring a puppy it is so easy to select one of good parentage and very simple to have him registered, and your chances are better that after he is trained and finished you will possess an animal of stamina, style, nose, brains and speed, while if you are content to select a pup of unknown parentage you may finish with a worthless mutt.

It is a trifle selfish to depend on established kennels to improve breeds of hunting dogs. Every dog owner is obligated to himself and the sporting world to improve the breed of his choice. The help can be through careful selection of pedigreed pups, registration, and selective breeding.

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Prevention of Hunting Mishaps
Game Agencies' Aim

According to a Sporting Arms and Ammunition Manufacturers' Institute report the percentage of fatal hunting mishaps in six of the nation's largest game states has been cut by 50% in eight years. The Institute survey includes the states of Maine, Michigan, Minnesota, New York, Pennsylvania, and Wisconsin.

Despite an increase of more than one million licensed hunters in these states between 1940-1948, fatalities decreased from 6.4 per 100,000 hunters in 1940 to 3.2 in 1948. In the same period non-fatal "accidents" dropped from 30.5 to 21.8 per 100,000 hunters. The Institute believes the great reduction in percentage of those injured or killed by gunfire in these states indicates the effectiveness of hunting safety campaigns.

While encouraged by this, game administrative agencies continue to seek new ways to overcome the causes of hunting casualties so that they may be reduced to an absolute minimum. In order to further study what causes some gunners to react as they do afield top level game representatives from Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, and the Province of Ontario attended the first hunting accident clinic ever held, March 30-31, at a Michigan Conservation Commission lodge near Milford.

It was the consensus that a uniform report should be devised and adopted to permit the collection of essential information that could be tabulated and studied on a nation-wide basis. Such a report form was prepared at the conference. The conferees felt that the cause for "accidents" must be known before a preventive remedy can be applied. Some states obtain their reports of hunting injuries and fatalities from newspapers only as compared with Pennsylvania's law which requires the reporting of every shooting mishap within 72 hours.

Game authorities in this Commonwealth are confident that hunter casualties can be reduced. They will continue to seek every practical approach to this problem in an effort to make the sport of hunting in Pennsylvania more safe for everyone.

THE OWLS OF PENNSYLVANIA

By ROBERT D. McDOWELL

In previous issues of the PENNSYLVANIA GAME NEWS (November 1938, January 1939, November 1940, February 1941, and April 1941), Langenbach and the writer published the results of their stomach analyses of the various hawks and owls examined by them.

Since the last article appeared, additional specimens have been received and their stomach contents analyzed by the same persons. It is the intent of this article to present the diet analyses of the various owls of Pennsylvania, exclusive of the Great Horned

Owl. Included herein are the results of the previous study (PENNSYLVANIA GAME NEWS, November 1938).

In the tabulation below each individual of each prey species discovered among the stomach contents (except insects) is listed.

An examination of these stomach analyses of the Long-eared Owl, Barred Owl, Short-eared Owl, Barn Owl, Screech Owl, and Saw-whet Owl would indicate that they deserve the protection afforded them by the Pennsylvania Game Commission.

Diet Chart of 144 Owls

No. stomachs analyzed	Long-eared Owl		Barred Owl		Screech Owl		Short-eared Owl		Barn Owl		Saw-whet Owl	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
STOMACH CONTENTS												
Mice	134	(92.4)	22	(42.3)	5	(22.7)	11	(91.7)	15	(75.0)		
Shrews	6	(4.1)	8	(15.4)	3	(13.6)			5	(25.0)		
Chipmunk ..			4	(7.7)	1	(4.6)						
Cottontail												
Rabbit			2	(3.8)								
Rats	1	(0.7)	1	(1.9)								
Moles			3	(5.8)								
Unidentified Mammals			1	(1.9)								
Passerine												
Birds	4	(2.7)	2	(3.8)	3	(13.6)	1	(8.3)				
Ruffed Grouse ...			2	(3.8)								
Screech Owl			2	(3.8)								
Sparrow Hawk			1	(1.9)								
Unidentified Birds			2	(3.8)	1	(4.6)						
Newt					1	(4.6)						
Frog					1	(4.6)						
Fish					1	(4.6)						
Crayfish ...			1	(1.9)	1	(4.6)						
Insects			1	(1.9)	5	(22.7)					1	(100.0)
Total	145	(99.9)	52	(99.7)	22	(100.2)	12	(100.0)	20	(100.0)	1	(100.0)

1950 BEAVER TAKE LARGE

In the 1950 Pennsylvania beaver season, February 15 to March 1, the harvest was 2,777. This year's catch of these valuable furbearers was spread over 39 counties. Six counties were in the 200 class. The take is considered good, compared with other seasons in this Commonwealth.

With the market price of beaver skins low this year, the interest in trapping in the past season was surprising to many. This year a "blanket" or 60 inch hide brought, at best, between \$25.00 and \$30.00. The average on all sizes was but \$12.00 or \$13.00. Just following World War II, the same pelts would have brought close to three times that much.

Weather conditions played an important role in the results of the 1950 beaver season. In the northwestern part of the Commonwealth trappers got a pretty good deal, but those in the northeast were hampered by a sleet storm at the beginning of the trapping period, later by "rotten" ice that made trap setting over water so risky many trappers discontinued their operations.

County	No. Beavers
Armstrong	2
Bedford	1
Blair	1
Bradford	60
Bucks	6
Butler	20
Cambria	31
Cameron	46
Carbon	1
Centre	38
Clarion	29
Clearfield	79
Clinton	47
Crawford	509
Cumberland	1
Elk	198
Erie	199
Forest	184
Fulton	4
Jefferson	11
Lackawanna	11
Lancaster	1
Luzerne	68
Lycoming	43
McKean	192
Mercer	64
Monroe	34
Perry	1
Pike	46
Potter	206
Schuylkill	1
Sullivan	57
Susquehanna	39
Tioga	75
Union	2
Venango	81
Warren	240
Wayne	114
Wyoming	35
Total	2,777

NOTICE

The Pennsylvania Game Commission will hold an examination for taxidermist permits on Wednesday, June 7, 1950 at 10:00 a.m. in Temporary Building No. 1, State Capitol, Harrisburg.

Monument to a Hunting Casualty

On November 30, 1948, a young man named Harold F. Martin, whose residence was Pittsburgh, Pa., set out on a deer hunt in Elk County. He was killed that day by a weapon in the hands of a careless hunter or by a stray bullet.

On the first day of this month the Elk County Sportsmen's Association installed a monument at Croyland, Elk County, on State Game Lands No. 44, commemorating the tragedy. Harold Martin's widow and her little son were present at the ceremony. In making the dedication talk, M. E. Sherman, Division "E" Supervisor of the Game Commission's Wildlife Conservation Division,

said: "As this happy hunter pursued his way through the forested region, absorbed in the hunt, perhaps his thoughts wandered to his wife and baby boy at home. . . . Without warning, a deadly missile, fired from the rifle of some hunter, struck Harold F. Martin and laid him low. He lay stark and cold until he was found by searchers. . . . May we dedicate this monument to the memory of Harold F. Martin, whose fate was thus so tragically sealed."

Yes, and may hunters who read this or view the monument reflect on the tragic results that may follow the pursuit of wild game in God's great out-of-doors when firearms are carelessly or negligently handled.

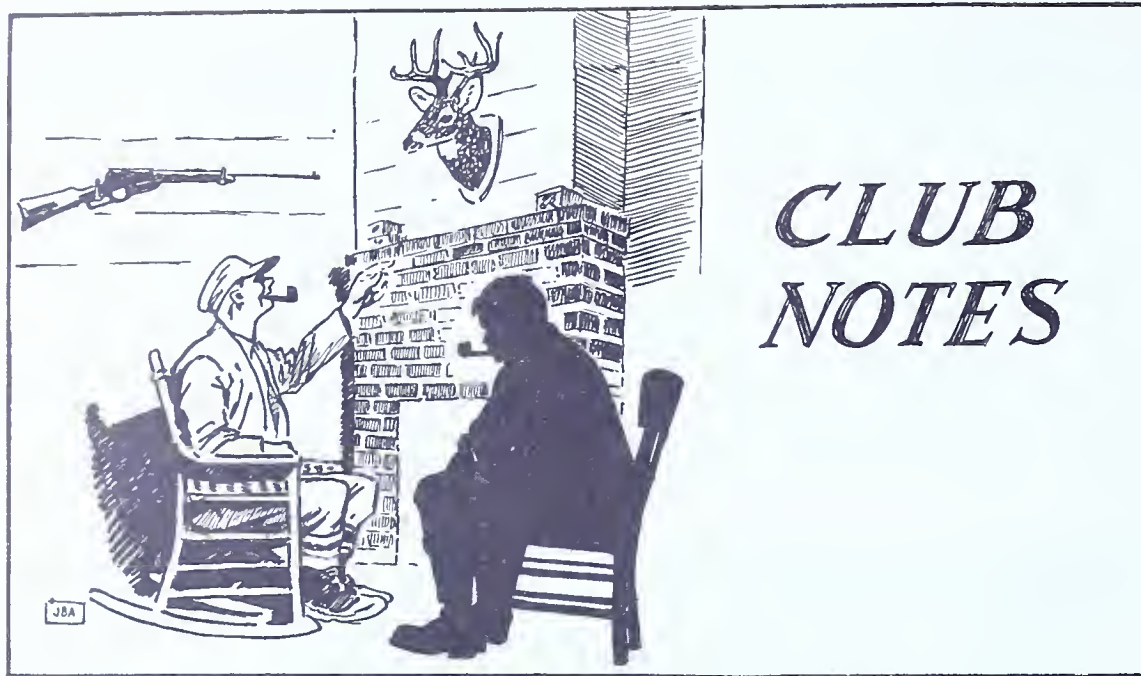


Pennsylvania Fox Hunter Claims Record

"Champion fox hunter of Pennsylvania" is the title Hervey Keller, retired Benton, Columbia County, farmer might well claim. Over the past four years, during which records were kept, Mr. Keller together with several of his hunting pals has slain 351 foxes over Keller's three fine hounds. All of these foxes were taken between August 20th and March 31st, the lawful dog training season. Thus his actual legal hunting time was reduced to about 30 months for the 4 year period. During the small and big game hunting season he does very little fox hunting, if any, because of the many hunters afield.

On March 31st, Mr. Keller announced that he and his hunting companions had killed 110 foxes, the highest score of any year in the four-year period. Of these 110 foxes, 109 were grays and 1 was a red. These were all taken in the Counties of Columbia, Montour, and Northumberland, most of them in Columbia County.

Mr. Keller reports that since late in the war period he has noticed a decided decrease in the red fox population and an equally definite increase in gray foxes. For his own information, he examined eight females taken late last winter. The vixens were found to be carrying 50 young.



Delaware County Field and Stream Association

The Delaware County Field and Stream Association recently held a Junior Field Day in which only Junior members participated. Fifty boys, ranging in age from eight to sixteen years, were divided into ten groups of five boys each. Ten senior members of the Association were in charge, one leader to each group. At 10 different points, covering the high power rifle range, small bore rifle range, pistol range, the traps, the skeet layout, plug casting court, fly casting court and three different points where fish, game and conservation could be discussed, a senior member (experienced in that particular phase of the outdoors, and assisted by the local Game Protector and local Fish Warden) was in charge to lecture and demonstrate to the boys. Fish laws and game laws were discussed, nomenclature of guns and proper method of handling and shooting were shown, proper ways to fly and plug cast were demonstrated, feeding game and building feeding stations in winter was explained, and at the discretion of the leader, most boys were permitted to shoot or cast, with emphasis on safety.

Each leader carried a score card bearing the name of each boy and each contestant was scored for each event, for interest, participation, conduct, safety and knowledge. Each scoring item had a high rating of three and it was possible for a boy to be scored 15 points each on the activities he took part in, or a total of 150 possible points for the day. Sophomores and juniors in high school were further screened at the end of the day and the two considered best by the judges earned a week's trip to the Junior Conservation School to be held at State College this summer. All expenses for the trip will be paid by the Association. Ten other boys, three in the group from 8 to 11 years, four from 12 to 14 years, and three from 15 to 16 years will be entitled to a three-day trip to the Brotherhood of the Jungle Cock Campfire in Thurmont, Md., (sponsored by the Outdoor Writer's Association of America) and all expenses for these boys will be taken care of by the Delco group. Free lunches were also provided as part of the Field Day.

Southern Federation of Coon Hunters

Scheduled field trials conducted by the Southern Federation of Coon Hunters, headed by president George Wain, Hooversville; vice-president Kenneth Berkebile, Hooversville; secretary Joseph Oravec, Portage; and treasurer Clyde Hess, Johnstown, for the summer are as follows: June 11, Somerset Pike; July 15, Portage; July 30, Wilmore; September 3, Defiance; and September 24, Claysburg.

Hellertown Sportsmen's Association

The Hellertown Sportsmen's Association is planning an eight week course in rifle instruction for their junior sportsmen. The club also will sponsor during the summer months instruction periods in plug and fly casting.

Beaver Falls Sportsmen's Assn. To Hold Field Days, June 3d & 4th

The Beaver Falls Sportsmen's Association will hold their Annual Field Days Celebration at Brady's Run Park, Beaver County on June 3rd and 4th.

This promises to be a gala affair and a large crowd is being arranged for by the Entertainment Committee under the direction of Dr. F. L. Wertz, Director of Entertainment.

Aside from expert shooting exhibition by Mr. and Mrs. Lind of the Winchester Arms Company, Pistol matches and expert casting has been arranged for.

A cordial invitation is extended to members, families and friends of all Sportsmen Clubs in Western Pennsylvania. The public is also invited.

A basket picnic will be held on Sunday June 4th. Exhibition shooting and matches will be held both days. Bring your families and friends and let's all have a regular old fashioned picnic.

Tedyuscung Sportsmen's Association

According to Frank Wenger, Chairman of the Publicity Committee, the Tedyuscung Sportsmen's Association of Philadelphia desires to exchange their monthly club bulletin, "The Tomahawk," with other clubs throughout the state. Organized late in 1946, this Association has made great strides. Among their accomplishments are listed the construction of one of the finest small bore rifle ranges in the state, sponsorship of a comprehensive youth program, and a stream improvement program. The club meets on the first Monday of each month and is currently led by Edwin Walter, president; John Noble, vice-president; Erle Ehly, secretary; Dr. J. K. Leech, treasurer, and Stanley Regula, Financial Secretary.



The Chester Springs Junior Fish and Game Association, shown here, is the only active junior organization in Chester County. The club was organized in 1948 and besides holding regular meetings, has engaged in many special activities such as firearms instruction, rifle range work, fly tying, field trips to conservation points of interest, and coon hunts which resulted in the banquet shown above. The senior leader is Reginald Scheetz.

THE FISHERMAN'S ENCYCLOPEDIA—Edited by Dr. Ira N. Gabrielson and Francesca LaMonte. A companion volume to "The Hunter's Encyclopedia." Stackpole and Heck, Telegraph Press Building, Harrisburg, Pa. Price \$12.50

It required half a million words and hundreds of illustrations, but the editors of this encyclopedia have managed to gather between the cover boards of one book all the factual knowledge on fish and fishing that the angler or outdoor enthusiast could possibly desire. Planned to cover completely the fishes and fishing methods of North America, it does just that. The book covers both fresh and salt water game fish, fishing equipment and methods, crafts for fishing, fish management, where to fish, when and how to fish, and such miscellaneous subjects as fish predators, fly tying, rod making, fishing contests, fishing clothing, knots for nylon, and building a fisherman's library. By no means the least commendable feature of this volume is the number and quality of its illustrations. Most of the game fishes of North America appear in full color as do all of the well known flies, streamers and other baits used by the angler on our inland waters. Stoutly bound to withstand rough usage, this volume should be in every angler's library.

BOBWHITES ON THE RISE—Verne E. Davison. Charles Scribner's Sons, 597 Fifth Avenue, New York 17, New York. Price \$3.75

The bobwhite quail, America's most popular upland game bird, has been decreasing in numbers with alarming steadiness during the past two decades. Biologists have had little difficulty in finding the cause for this decline but have not been unanimous in their recommendations for checking it. Davison, a regional biologist with the Soil Conservation Service, has made an intensive study of the bobwhite throughout most of its range and this new book summarizes his opinions resulting from long field experience and research. The hope for continued quail shooting in the future, he feels, lies in the far-flung soil conservation movement. Farmers who want more quail on their land can have them by making a small investment and by following approved soil conservation practices. All of the wildlife practices which he advocates are recommended as vigorously by agriculturists. This new book should be read by all sportsmen and landowners interested in perpetuating and increasing the bobwhite. The quail hunter will find much valuable new information which will help him understand the needs of his favorite game bird and which will tell him what he can do to help preserve it.

THE OUTDOOR GUIDE—Luis M. Henderson. Stackpole and Heck, Telegraph Press Building, Harrisburg, Pa. Price \$4.50

While this book will not tell you how to cook a wolf, it will tell you how to meet just about every other situation you will meet in field, forest and shore. It will also give directions and recipes for good cooking and good eating under adverse conditions. This exceedingly revealing new book will open new opportunities of enjoyment for the outdoor man or woman; boy or girl. It's practical guidance to the hiker, hunter, fisherman



or camper is inclusive and invaluable. From identifying animal tracks to foil cooking, the directions are detailed and explicit. By text and drawings the author-artist gives clear directions which the novice can follow in making outdoor equipment that reduces the cash outlay and the burden of the pack. From the toilet kit to the permanent camp the emphasis is on practicability and comfort. Here are untried theories or intricate devices. The whole book is down to earth, from mouse track to bear dens; from safety pins to tent stakes. Topics created include what to wear and why; the outdoor home; ax, wood and fire; packs and packing; foods and cooking; knives; wilderness house-keeping; the canoe; tracks and dens; and first aid. The volume is in a real sense an eye-opener to greater understanding and enjoyment of the outdoors.

OFFICIAL GUN BOOK—Charles R. Jacobs. Crown Publishers, 419 Fourth Avenue, New York 16, New York.

A total of 154 models of rifles, shotguns and handguns are now being produced by American sporting arms manufacturers. The author presents them all in this new gun book, just off the press. Rifles lead the parade. There are 70 rifles of which 17 are high power models and 52 small bore 22's. There are 51 shotguns in production with the slide action variety the leader with 17 models. In the handgun field, there are 19 revolvers and 14 pistols on the market. These figures are among hundreds of facts and features of interest to hunters and shooters in this volume. It is the latest of the popular Paul, Richmond hunting and fishing series. There are 178 large-size pages cramed with all the latest dope on ammunition, reloading, rifles, shotguns, handguns and shooting. The book contains articles by 15 nationally famous experts. Made up in encyclopedic style with easy-reference page headings, **OFFICIAL GUN BOOK** is one of the most complete and up-to-date of gun books.

RAISING GAME BIRDS IN CAPTIVITY—David B. Greenberg. D. Van Nostrand Company, Inc., 250 Fourth Avenue, New York 3, New York. Price \$4.95

This new volume is probably the most complete and undoubtedly the most up-to-

date book on the subject of artificial propagation of game birds. It is profusely illustrated with many excellent photographs, nearly all of which illustrate techniques and construction methods covered in the text. There are many diagrams and sketches to show suggested propagation unit lay-outs and building details. The author covers all species of game birds, which it would be practical for the beginning game breeder to consider, with special emphasis on bobwhite, ringnecked pheasants, and waterfowl—the three easiest to raise and for which there is the largest market. Chukar partridge, Hungarian partridge, and wild turkey, however, are covered in detail. There is a very complete section on artificial incubation, another on nutrition and feeding, and a third on the management of a game farm. Mr. Greenberg has operated his own experimental farm for many years and was a former professor of poultry husbandry at the New York School of Agriculture. His introduction shows that, unlike many advocates of artificial propagation, he recognizes restocking as a tool of wildlife management rather than as an end in itself; in his introduction there is a strong plea for more and better habitat restoration work.

THE FISHING AND HUNTING ANSWER BOOK—David M. Newell. Doubleday and Company, Inc., Garden City, New York. Price \$2.45

David M. Newell, former editor of **FIELD AND STREAM** and at present associate editor of **SPORTS AFIELD**, is one of the most widely experienced sportsmen in North America. When such a man writes a book on hunting and fishing, it is bound to be well-written, well-organized, and authoritative. This volume contains the answers to over 3 million questions and includes numerous tips and kinks on hunting and fishing problems. For easy reference, the material has been grouped under six general headings: fishing, hunting, dogs, guns, the outdoors, and snakes. This book is based largely upon the author's long experience on "The Fishing and Hunting Club of the Air" which Mr. Newell conducted and will answer many questions that perplex veteran sportsmen as well as beginners.



Both young and old enjoy deer hunting in Pennsylvania. Shown here are Ben Houser, Jr., with a buck shot on December 9, 1949 and his grandfather, Harry Houser, of Tamaqua, with a doe killed on December 10.

some time or other during the game. Or if 325,000 jockeys rode horses in a steeplechase in one day, or that many players took part in polo games in one day, what would have happened? How many accidents would occur among 325,000 players in baseball games in one day? After all, hunting is not so dangerous as it may seem and a hunter on December 10 faced a chance of one out of 14,130 of being involved in a nonfatal accident. Surely that sounds safer than being one of 325,000 people riding in automobiles any day. Statistics show that there are many days with fewer hunters in the woods when the chances of an accident are much greater, apparently because of a laxity in caution.

Why do we have antlerless deer seasons? It takes approximately two pounds of choice browse for each one hundred pounds of deer per day in order to maintain the proper body weight, the biologists tell us. If the 84,121 deer killed averaged eighty pounds each live weight, and that is the figure used in our annual game kill estimates, they would have consumed 134,593 pounds of food per day. If this herd of deer were still alive, it would require approximately 15 million pounds or 7,469 tons of choice food to have kept them in good condition from December 11, 1949 to April 1, 1950. Imagine the size of such a stock pile, if the buds and other foods were placed together? If these deer, or some of them, had to resort to what we might call "stuffing foods," as they do in many sections, the total quantity of food would be higher. The food supply is just as important to a Pennsylvania deer as it is to people in concentration camps or war-torn countries. We cannot send CARE packages to the deer. Artificial feeding of deer is rather impractical, expensive and wasteful. We are everlasting working to produce more natural food for

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the deer in their true environment, but you cannot drain a lake by using a bucket as long as it is raining; therefore, harvesting surplus deer is a management problem, to be measured on the basis of food supply.

Can there be such a thing as unbalanced sexes in the deer herd? Ordinarily nature produces an even number of males and females among our deer. The records show that since 1915 the deer kill is almost evenly divided between the legal antlered and the antlerless deer, but if there had been no antlerless deer seasons, and does continuously protected since 1915, can you imagine our situation today? The farmer saves his prize bulls for breeding purposes, but in deer hunting a man tries to kill the prize bucks for the trophy. The tabulation of the kill on December 10 shows a total of 15,328 male antlerless deer and 68,793 does.

Please do not forget problems now confronting many farmers due to the large herds of deer that have developed an appetite for choice food in the form of beans, alfalfa, clover, buckwheat, corn, potatoes, etc., instead of the lean picking that laurel leaves and twigs furnish. When food becomes scarce in the big or deep woods, the deer are attracted to the farms and cultivated fields.

The records show that deer were killed for crop damage in Pennsylvania during the past three years as follows:

Year:	Number of deer:
1946	1967
1947	1644
1948	1541

The killing of antlered deer alone year after year will not give the farmers relief from the depredations of too many deer.

For the benefit of those farmers and vegetable growers who are having trouble with the deer, it is well to say that there are some deer repellants that are effective. The B. F. Goodrich Company, of Cleveland, Ohio, has developed a deer repellant known as "Goodrite Zip." It is mixed with water to make a spray, and soapy water should be used to avoid having it washed off by rains. If this product cannot be secured locally through a feed store, hardware store, or other distributor, it can be purchased from the company. It can be used on practically all kinds of plants excepting lettuce or similar vegetables where the leaves are eaten.

There is another deer repellant known as "Acme Toxo" made by the Progressive Biological Company, 181 Columbia Street, Cohoes, N. Y. More information concerning this repellant can be secured from the manufacturer. Mothballs, gum asafetida, and similar loud-smelling agents are also effective at times and in certain locations. Still another repellant more recently discovered is Diamond "L" Deer Repellant, manufactured by Harry N. Leckenby Company, 1634—15th Avenue, West Seattle, Washington. This is also a spray, and good results are being secured from it on experiments that have been conducted in New Jersey. The writer has no connection with any of the companies manufacturing commercial deer repellants and they are mentioned only as a matter of information.

Do all rural or city deer hunters, farmers, orchardists, and others advocate the same action to solve the deer problem? Well! not quite the same. The speeches and correspondence regarding this problem alone would fill many volumes. But it would be almost like someone has said about reading the dictionary, "It is very interesting, but it treats on so many different subjects." Hardly two recommendations or suggestions are alike. Some hunters dream of the deer that they would like to kill when next

year's season comes along, and they cuss the Game Commission if the deer aren't as thick as hair on a dog where they go hunting.

Some hunters see only buck hunting, and cannot imagine how a deer herd could possibly become unbalanced by killing the big trophy animals only year after year. Some of these folks post "NO DOE HUNTING" signs when there is an antlerless deer season. Some farmers don't want a single wild deer in the county where they live. Some folks advocate a law to prevent the signers of petitions to abrogate an antlerless deer season from hunting anywhere in open territory. Some sportsmen recommend deer hunting from sunrise to sunset. Some want antlerless deer hunting two days a week out of a two-week deer season, and so it goes. Someone has said, "He who knows only his side of the case knows little of that." Wouldn't it be wonderful if all deer hunters would take a look at the other fellow's side of the picture?

Many of the people who think they have the answer to this important and vexing problem are like a boy who peeps through a knot-hole in a high board fence to watch a baseball game. They get only a long-distance view of the game and aren't contributing to the sport in the same way as the folks on the grandstand who can see every play and really know what is going on.

Some counties are reported as having hardly any deer within their borders since the 1949 deer season. Potter and Cameron Counties report excessive deer damage since the antlerless deer season. May I quote from the NEWS-LETTER of the Game Commission released on February 13, 1950, regarding a meeting at Coudersport on February 3 of representative farmers, other property owners, Commission officials, legislators and leading sportsmen, as follows:

"Numerous farmers and property owners cited sizeable losses—some of them borne for years—in grains, clover, potatoes, strawberries, fruit trees, and evergreens. Nearly all of the complainants asked only that the herd be reduced and controlled, expressing opposition to any thought of its extermination. Several stated that they, too, enjoyed hunting, and welcomed the right type of deer hunter to Potter County. A delegation of farmers from Cameron County, present at the meeting, offered to join forces with their Potter County neighbors to help find the answer to the deer damage problem.

"At this orderly protest meeting, fairness and restraint ruled. Long-suffering people asked only that they be relieved of unnecessary, frequently considerable, financial loss by deer. There was little indication that the law protecting deer that menace Potter County farmers' livelihood would be broken if their demands were not met. Those present seemed confident that when representatives of all concerned joined in discussing the common problem a workable solution would be found. What a lesson this meeting would have been to those who talk against the 'American Way.' Here was exemplified 'democracy at work!'"

Have there been any highway accidents in which deer have been involved since the season closed on December 10th? Approximately 50 deer were killed by automobiles and trucks on the highways in different parts of Pennsylvania between December 10 and 31, 1949. One person writes that this is because there are too many automobiles in the State. That answer will hardly satisfy the folks whose cars have been damaged by hitting deer.

The worst accident was the one in Mercer County where the Superintendent of Schools of Sharon hit a button buck seven miles south of Mercer on December 29. His car was

badly wrecked; he was hospitalized for eleven days; lost a full month's work; his jaw was fractured in two places, and his face required thirty to thirty-five stitches; his glasses were broken and his clothing soaked with blood. This was the second deer hit by this man's car this past fall. Well, you would think that if this man never sees another deer it will be too soon. Yet, many people insist that we should have a deer population in farming country and just outside of Philadelphia and Pittsburgh.

In another Game Protector's District five deer were killed on the highways during the last three weeks of December; in another officer's district seven deer were killed in like manner during the same period; another officer reports six deer killed, while another protector reports ten deer killed on the same highway in his district.

Let us go from the highways to the farms. Again, let us scan the reports from the Game Protectors in various parts of the State. They show that farmers report having seen from 12 to 40 deer grazing on their fields in a single evening since the 1949 deer season closed. All the farmers and truck growers throughout the State who have suffered crop damage should certainly receive consideration in any effort that is made to control the deer herd.

In many sections the deer undoubtedly are recovering nicely from previous antlerless deer seasons and the herd is not too large—from the standpoint of the deer hunter. In some of these areas the food supply is not too large either, because of the growth of the forests and the resultant scarcity of natural food. There is no use trying to build up the deer herd in these counties, only to have starvation and crop damage enter the picture and new Potter County conditions created. When forest conditions change for the better, deer should be given the chance and will increase again in these Counties.

Some folks place doe deer in almost the same category as the "sacred cows" of India, and do not want any of them killed. Others do not want to have any deer at all. Somewhere between these two extremes lies the proper answer for the proper balancing of the herd, protection to farm crops, and the restoration of good deer range. We are all hoping, I am sure, that the field officers' reports and the sentiment among the sportsmen and the farmers will be so completely crystallized, the Commission will be able to decide this \$64.00 question for the best interests of all.

And, now, let us relax—quit counting deer—fall asleep, and may the dawn of a new tomorrow bring new thoughts into our minds that will provide the answer to one of the biggest and most controversial wildlife conservation problems of the first half of the Twentieth Century in Pennsylvania.

This fine buck was bagged by 17-year-old Harold Rosenberger of Waynesboro during the last deer season. The youth was hunting near Chimney Rocks in the South Mountains. The spread is 22 inches and the height of the highest point from the head is 18 inches.



Solomon. Should he destroy the mink? So far everything had progressed smoothly; the mink unaware of the close proximity of a right juicy meal, while the grouse, even if she was aware of the presence of a whole family of her arch enemy, had apparently decided to sit it out. Sickles wisely chose to let nature take its course. And, as we know, he never had reasons to regret his choice. However, nature is not always as benevolent.

On a hammocky island somewhat higher than the surrounding marshland near the Bullistown peninsula, is located the short limbless stub of a half rotted beech. Surmounting the squarely broken top of the squat trunk is the nest of a bald eagle, a great stack made annually larger by the addition of new building material.

In a dozen years the pair of eagles using the nest not only increased its bulk to top-heavy proportions, but also succeeded in hatching and rearing an even two dozen offspring.

On this particular day the male was at his usual lookout high atop a dead maple tree stranded in shallow water some two hundred yards from the eyrie. His mate was on the nest brooding two recently hatched eaglets.

After a vigil of some fifteen minutes the male regally mounted into the air and began spiralling swiftly into the blue. When he had ascended so high as to appear no larger than a robin, the bird set its wings and began a swift glide toward the south; the thin scream of the windstream as it swiftly rushed through the taut flight feathers seemed to intensify rather than to disturb the soundless spaces through which he sped.

At the end of the aerial toboggan run somewhere near the open water just north of the Blair Bridge road, the eagle swooped suddenly downward and hit the water with a resounding splash. Even before the smother of spray which momentarily enveloped him had subsided, the feathered flier was up and away, the great wings beating slowly but powerfully. Gripped in the scimitar-like talons was a four-pound carp which it presumably spied floating dead when at the zenith of his climb. At a speed much greater than the thrust of the laboriously flailing pinions the bird headed straight for its eyrie more than two miles away.

As the male approached the nest, the brooding mother's eyes narrowed in anticipation of the meal for both her offspring and herself. When the partly decomposed fish was dumped into the nest she seized it at once and began tearing it into bits small enough for the ungainly eaglets to handle. In the meanwhile, the youngsters uttered eager little cries resembling low raspy whistles.

And thus the day passed for three Pymatuning families whose home life we have but briefly glimpsed.

In the Pymatuning it is not unusual to walk through large unbroken tracts of larches or other conifers and find scattered through them huge gnarled apple and pear trees, survivors on abandoned farmlands now a part of the vast swamp comprising much of the refuge area.

The coniferous stands are made up of trees hardly more than a score of years old while the apparently alien fruit trees are patri-

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archs that were originally set out as young trees by the early farmers settling on the rich muck lands of the region.

On the southern edge of the Bullistown plantation there stands aloof and alone, an ancient apple tree. And although it is hollow all the way down to its base, it still sends out a thin canopy of leaves and a scattering of blossoms. Those who know of it sometimes visit the spot in the early fall to gather some of its peculiarly shaped fruits, the tasty sheepnose apple, a favorite of bygone days.

Up where a large branch joined the whorled trunk of the old tree there was a hole, and the few telltale hairs clinging to its edge indicated that it was the entrance to a raccoon's cosy den. The current tenant of this extraordinary den was an extraordinary 'coon, a well-seasoned veteran versed in the ways of both man and nature. On several occasions she had outwitted the reputedly canny dogs of "Crutches" Johns, one of the best 'coon hunters in all Crawford county. Crutches has long maintained this reputation despite the fact that he possesses but one leg, following his dogs with the aid of the adjuncts giving him his name. Notwithstanding his loss (it cannot be called a handicap), Crutches is an expert climber, he himself modestly attributing his amazing agility to the fact that there is one less leg to haul up after him.

While the guileless young moon still lingered with the silvery beauty of Fricke's Woods, the raccoon bestirred herself. One by one she touched the four youngsters snuggling at her side, and they retaliated in turn with drowsy little squeals of contentment. After a final lick or two she scampered upward to her doorway where she paused to reconnoiter.

The spring chorus of the frogs was already in full voice, the ear-splitting peeps of the little hylas or spring-peepers as well as the pipings of the even more diminutive cricket-frogs all but drowning out the clamorous clucks of the wood frogs. When the shrill chorus ceased momentarily as it did from time to time, the low guttural croaks of the pickerel frog sort of punctuated the welcome lull. To the 'coon these voices of the amphibian clan betokened food in abundance.

For one so portly the raccoon negotiated the tree trunk with considerable agility and no little grace. On the ground she paused for another look while her sensitive muzzle sampled the night air. After assuring herself that the coast was clear she slowly walked to the edge of a nearby pool and flattened her plump body at the water's margin. As could be expected, the frog chorus in her immediate vicinity ceased at once, the little musicians having ducked to safety even at her silent approach.

The memories of most wild creatures are notoriously short and the frogs are no exception. In less than ten-minutes they were again lustily singing, their little bodies swollen like that of a pouter pigeon.

Just as the patiently waiting 'coon had about decided to settle for one of the smaller species, a fine, plump leopard frog noisily splashed within reach. Like a flash one of

the 'coon's hand-like paws shot out and tossed the frog on the ground behind her. In another instant she was upon it and terminated its brief struggles with a bite through the spine.

The raccoon did not at once eat her meal. Instead, she carried it to the water and thoroughly washed it, laving it of every particle of clinging debris and soil before she deigned to sink her fine white teeth into it.

After finishing her meal the 'coon ambled off in the direction of the peninsula, following a roundabout route by way of an old tote road skirting the western edge of the dump. At a point on the road the spring rains had opened up a narrow break which connected a series of small roadside ponds with the refuge lake. On this particular night a steady line of carp were migrating from the lake to the ponds, the big fish fighting their way through a flow of water so scanty as to hardly reach to their pectoral fins. But, by dint of patience and Herculean efforts they managed it.

When the 'coon came to the break she paused for a moment as if to study the situation, the line of fish seemingly only arousing her curiosity. After satisfying this well-developed trait of her tribe, a graceful leap carried her to the other side and she was on her way, disdaining to give even so much as a backward glance. She was heading for that part of the lake where experience had taught her to look for crayfish. More than anything else she craved a mess of the succulent crustaceans.

As the 'coon skirted the pine wood and was about to pass into the growth of leafless hardwoods and alders and thence to the edge of the softly lapping lake, she was stopped dead in her tracks by the smell that suddenly smote her nostrils. So tantalizing and close was the familiar and yet, elusive odor that it prompted her to spring blindly in its direction. With a soft, muffled crunch both of her outspread front feet landed full on the nest of grouse eggs. After completing their destruction she daintily licked the sticky mess from her black paws and went on about her business.

Since it was still too early for the few crayfish found living in the Pymatuning to have moved inshore, the raccoon found the hunting very unsatisfactory. After foraging for a time among the rocks and duntimber in the shallows, she gave it up as a futile job. And, besides, her ample stomach now craved something more substantial than either crayfish or frogs.

The raccoon was not selected as our most intelligent native wild animal for nothing. Coupled with this intelligence is an unusual amount of natural sagaciousness and resourcefulness. Summarily, one seldom meets up with a poorly fed 'coon.

A 'coon seldom preys on anything belonging to man, but when the prey consists of big, foolish, white birds literally festooning the fences, trees and other suitable roosts, located as many of them were, some distance from the farmhouse, then, it's another story. Accordingly, the raccoon's memory reverted

to former forays on the white Holland flocks of the Steele farm. She at once headed for the place, running as silently and as lightly as a tuft of thistledown. Curiously, her tracks showed that she ran on her toes and not flatfootedly as she does when walking leisurely.

Presently, a furtive shadow could be seen moving along the snake fence on the western boundary of the Steele place. In a matter of minutes the 'coon had reached the first outposts of the turkey clan, a trio roosting some distance from the main flocks. One of the three birds awakened by a suspicious sound tried to peer into the shadows below him. As he stretched his neck he uttered an enquiring quip.

In the meanwhile, the 'coon had agilely climbed to the topmost fence paling and sprang even before the young tom had finished giving his outcry. It was the last conscious sound uttered by that bird. The raccoon's aim was unerring, the sharp teeth meeting at the base of the skull. The pair fell to the ground, a smother of thrashing feathers all but obliterating a whirling brown body. In a moment it was over and the 'coon began at once to feed on the plump, quivering breast while the two more fortunate survivors, still clinging to their roost, stupidly looked on.

After feasting to repletion, dispensing completely with the instinctive niceties of her clan, the 'coon took a short cut for the home tree. The trip across the field and thence through Fricke's Woods was uneventful. At a point in the circuitous route along the bay shore the animal suddenly stopped and lifted her sharp muzzle. Chance had caused her to cross an air current heavy with the scent of the brooding goose. The raccoon instinctively crouched, her eyes narrowed.

As she turned in the direction from whence came the tempting odor, she at once spied the silent gander nervously swimming about in a small circle. The bird had not seen the 'coon, but with that uncanny sense of perception possessed by all of the wild kindred he seemingly knew that danger was im-

minent. He uttered a soft but insistent warning to his mate. The goose already aware of the nearness of some deadly peril, nestled closer to her treasures as she drew back her head in an attitude of defense. She was a dauntless fighter and would exact a dear price from any transgressor.

However, the well-fed 'coon was in no mood to tackle anything as formidable as a pair of nesting geese. She presently rose to her full height and once again headed for the den tree.

By the time the 'coon had reached her buttressed home, dawn had broken, the eastern sky suffused with saffron shading into the soft, young blue of early morn. Plainly visible, silhouetted against the resplendent sky was the nest of the eagles. Far above it in the deepening blue could be seen the male bird as he circled majestically already foraging for his hungry young.

Suddenly the great bird swept into a glide as he spied something of interest in the bay just off the Bullistown peninsula. Coming from the heart of the pines could be heard the ventriloquial drumming of a male grouse, oblivious of the tragedy that had befallen the eggs. And even had he known, his philandering heart would have felt not the slightest remorse.

The raccoon finally slipped into the nest hole where she proceeded to make herself comfortable amid the anticipatory clamour of her hungry young. Nothing delighted her so much as the small, mousy sounds made by her family.

Outside, the swamp music had suddenly changed; its somber, tragic nocturnes replaced by the lilting but no less tragic cadences of the daylight hours. It was a fitting accompaniment to the feverish pace of revelers in the sunlight—live today for we know not what the night may bring.

MAKING OF A GAME PROTECTOR

from Page 11

get into the western part of the District will I stop at the game lands and see the foreman in charge of the bulldozing operations about something important. I saw him but it was after seven by the time we got all those cottontails in good cover.

Believe it or not, nothing happened the rest of the evening and I finished my reports and hit the hay early. With a big sigh, I slid in between the warm covers and popped out like a light. Well, it was about one-thirty when the telephone rang, angrily it always seems to me, and when my wife mumbled sleepily as I replaced the receiver, I said some motorist just stopped at the all night coffee house and said he saw somebody spotlighting deer down the road about five miles or so. While I felt under the bed for my shoes and struggled into my shirt and pants, I kept thinking that even if the job is a little rough at times, I couldn't be doing it for a better purpose than protecting our wildlife. Sometimes I'd like to know when one day officially ends and the other begins, I mean for a Game Protector?

Sportsmen's View

The Pennsylvania State Fish and Game Protective Association, Philadelphia, Pa., was organized in 1882. Recently the Association enjoyed its sixty-fourth annual dinner.

On the back of the program, under the heading "Our Outdoor Heritage," banquet guests read this: "God lent us the earth for our lives. The forests and the waters belong as much to those who come after us as to us. We have no right, by anything we may do or neglect to do, to deprive them of the benefits which are within our power to preserve."



GUNSTOCK CHECKING—from Page 17

another groove. On reaching their full depth these lines converge into a pleasing convex border that can be cut slightly deeper than the checking in order to hide the runovers.

All that remains is to brush out the dust and rub in a small quantity of linseed oil with a brush. These applications should be repeated every few days until a light coat of oil is built up on the wood.

The checking on the stock is done in the same manner as the forearm, but the curve of a pistol grip can cause no end of anguish, so play it smart and choose a shotgun or some other arm with a gently curving pistol grip for your first experiment. After you've become a bit more proficient you can tackle that close-gripped rifle, but not now.

Due to the utter impossibility of making the grooves on one side of a pistol grip match those on the other side a small unchecked strip is always allowed to separate

the panels at the top and underside of the grip. Incidentally, don't get too reckless on the inside of the pistol grip curve, for you are working in end grain here and the diamonds are easily chewed up if the tool gets out of alignment, particularly in soft wood.

Finish the panel with linseed oil as you did on the forearm and the whole job is finished. Now, wasn't that fun? So what if your fingers are numb and your eyes burn and your nerves are shot? That's beside the point. The gun looks swell, doesn't it? You're durn tootin! And I'll bet after you get a good night's sleep and chain-smoke a pack of cigarettes you'll feel like buying another un-checked gun just so you'll have something to work on. And in case you do, fig. 3 will give you some ideas for new checking designs . . . no use getting in a rut, you know.

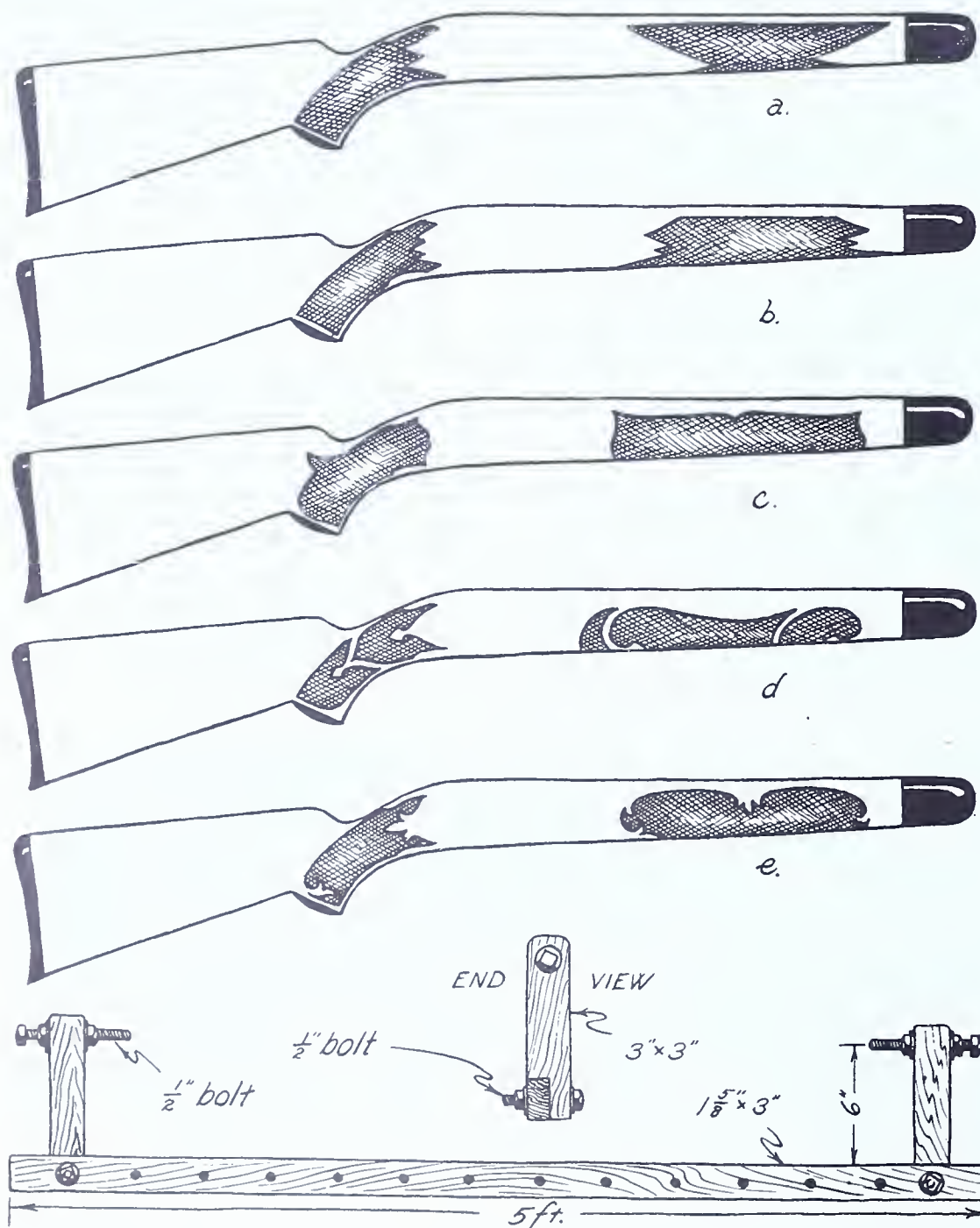


Fig. 3 - Checking Cradle & Checking Designs

C.S. Smith

FACTS ABOUT YOUR GAME COMMISSION—from Page 14

it follows that approximately one million dollars of the current revenue must not be used during the fiscal year in which it is collected; therefore, it must be on hand at the beginning of the next fiscal year.

Use of Part of Game Fund Restricted

While the Game Commission by law is given adequate authority relative to the expenditure of the Game Fund to finance its activities, the entire fund is not available for its general use. A law passed by the 1949 General Assembly restricts the use of \$1.25 from each Resident Hunter's License fee for improving and maintaining natural wildlife habitat that is available for public hunting; the purchase, maintenance, operation, rental and storage of equipment used in this work; the purchase, distribution, planting, cultivating and harvesting of game foods; the purchase, trapping and distribution of any game, as well as providing protection to the property of Farm-Game Cooperators. The law is somewhat technical as to what the \$1.25 must be used for, but the foregoing gives a high-light picture.

No Authority to Borrow Money

With the enactment of the Hunter's License Law, and the establishment of the Game Fund in 1913 to finance the game conservation program, it followed that the Commission did not and does not now have authority to borrow money for any purpose at any time, regardless of whatever emergency may arise. Being placed in such position, it can readily be understood why the finances must always be on a sound and conservative basis, so as to preclude the need for borrowing, and to finance its activities on a pay-as-you-go basis.

Conservation Education

Realizing the need to enlist the cooperation and help of others to promote the overall conservation program, years ago the Commission very wisely laid the foundation for its present far-reaching conservation education program. Today it not only trains students to become game protectors and game propagators at the Ross Leffler School of Conservation and provides refresher courses for its employees to keep abreast of developments, but it contributes or assists worthy conservation groups and programs such as:

- (a) Conservation Education Laboratory for Teachers
- (b) Junior Conservation Camp
- (c) Academy of Natural Sciences, Philadelphia
- (d) Carnegie Museum, Pittsburgh
- (e) University of Pittsburgh, Forensic League
- (f) Conservation Education Exhibit at Hershey Zoo

In addition to its official publication, the PENNSYLVANIA GAME NEWS, primarily a conservation education medium, it also publishes bulletins, leaflets, etc., to meet the growing demand for conservation material. Part of the Game Fund is used for this work, but money spent judiciously for conservation education can be expected to pay big and lasting dividends.

Wildlife Research

Research is recognized in all fields of endeavor today. The need for it in game conservation is no exception. The Game Commission is constantly searching for more effective and more economical methods to carry on its wildlife program. Therefore, part of the Game Fund is allocated to perform many research studies, and for cooperating with others in research work. Human progress has been the result of research. Money spent for research not only sheds light on answers to the many wildlife problems, but permits the Commission to operate scientifically with facts rather than haphazardly on a hit-and-miss basis.

Funds Used Promptly for the Benefit of Wildlife

A study of the affairs of the Commission shows that since the war a sincere effort is made to utilize the funds as early as possible after receipt for the benefit of the wildlife program, consistent with their judicious use and lasting effects. This policy results in the earliest possible benefits from the funds that become available. As is generally known, during the war it was both impracticable and uneconomical for the Commission to use all the funds currently that became available. As manpower and the necessary equipment and materials became available after the war, the accumulated surplus was used.

Value Received From Funds Invested

Any attempt to discuss the operations of the Commission should at least answer the question, "Does the Commission obtain value received from the funds it spends?" It is be-

lieved that few organizations, if any, receive as much for each dollar expended as does the Game Commission. A strong statement indeed, but supported by the following contributory factors:

(a) The many safeguards thrown around the funds.

(b) The ability, sincerity and interest of the persons appointed to the Commission.

(c) The class of personnel employed by the Commission and the unusual interest displayed by its employees, as well as the fact that the employees work many more hours than workers in most lines of endeavor. These facts are attested to by people who know the employees of the Commission.

Pittman-Robertson Funds

In an effort to advance the cause of conservation in Pennsylvania the Commission has and will continue to take advantage of all the Federal Funds made available under the provisions of the Pittman-Robertson Act. These funds are collected by the Federal Government through an excise tax on arms and ammunition and distributed among the various states on the basis of the number of hunters' licenses sold and the area of the State. The Federal Government requires the state to first perform and finance the work under a project approved by the U. S. Fish and Wildlife Service. As the work progresses or is completed in a satisfactory manner, the proper Government agency is notified and 75% of the cost of the approved work is paid to the State as a reimbursement. In Pennsylvania, practically all the Pittman-Robertson funds are absorbed in the food and cover

program. However, a small portion of the funds are used to assist in financing research studies.

What happens to the Pittman-Robertson funds received in the form of reimbursements may be of concern to sportsmen. These funds are deposited in the Game Fund in the State Treasury with the revenue derived from all other sources and immediately become available for general budgetary purposes.

Summary

With this background of the operations of the Commission, it can readily be seen that it has long since passed from the horse-and-buggy days and it is today a big enterprise with many ramifications and perplexing problems. Raising and protecting a satisfactory wildlife crop each year, managing it to provide seed for a future crop, providing food and cover, hatching and raising chicks, and doing the multitude of things that are essential to an effective statewide and well-balanced wildlife program, requires a well-trained organization working in the most effective and businesslike manner. An essential to accomplishing these things is adequate funds. Therefore, the budgeting of funds and financing the work requires extreme care and best business judgment because the Commission has no power to borrow any funds for any purpose at any time. The wise expenditure of the funds of the Commonwealth for the benefit of wildlife conservation and restoration is a public trust that can only be realized through the adoption of good business methods, and controlled by sound administration.

OUTDOOR KIDS—from Page 15

that somewhere; out of his sight, was a doe deer nervously waiting to see if her little one escaped the children that she had seen coming toward her long before they reached the laurel.

But Jane was not one to give up easily. Even after Billy explained that the fawn was not lost and that its mother was nearby, Jane insisted,

"I know, Billy, but we would take good care of him. We could feed him from a bottle until he learned to eat."

Although the fact that just keeping the deer was a violation of the Game Laws did not enter his head at the moment, another thought did strike Billy that had an effect on Jane.

"Oh, sure," he replied, "he would be cute for a little while, but I wonder how mom would like it if we had an animal as big as a calf and maybe with a whole rack of horns on its head running around in her flower garden."

"Say, that's right," Jane agreed, "I guess he wouldn't be so cute after he grew up, would he?"

Another important point that the children did not realize was that a wild animal, such as a deer, bear, raccoon and the like, do not return to the wild easily after they have been domesticated from the time they were babies. In-

deed, the papers are always publishing stories of deer that wander into towns or are shot by hunters while approaching for a handout. Black bears, once they are tamed, almost never become wild again. As a result, when they are released, they raid campsites, invite themselves to picnics and chase women and children through the woods in hopes of getting something to eat from the lunch boxes.

The great American habit of playing mama and papa to little lost woods creatures is a real headache to wildlife agents throughout the country. The well-meaning public never seems to realize fully that junior is not lost and that they will do him and everyone concerned a great favor if they will let those woods babies be.

Well, Billy and Jane were just children after all, and they could not resist the temptation to spend a little while playing with this lovely fawn. Once it knew that the children had discovered it, it tried to run away on those weak, spindley legs. The children caught it and listened laughingly as the little one bleated like a new-born lamb.

They carried him back to his bed under the laurel, and when they left the woods, he was still there, scared to death, but safe where his mother would find him and take good care of him.

REGISTRATION—from Page 21

A great pleasure of association with men who love gun dogs is the pride of ownership of fine field performers. It is a thrilling experience to listen to reports of field ability, beauty, style, spirit, affection and all the other qualifications of a gunner's "dog of all dogs." It is not complete unless his pride also includes famous names of his family for generations.

Men whose dogs participate in the fields trials waste no time whatever with a dog "without papers." Registration of the young ones is as important as the dog itself and the most careless one would never neglect it.

Another great asset to one who registers eligible pups is monetary value. Try to sell the young of cold-blooded parents and it will

be rare to get more than ten dollars each, while a great many will be given away free. Registered puppies of valuable lineage may, and quite often do, bring hundreds of dollars each. It can be big business. The show dog group are always very careful to register their dogs.

The American Kennel Club of New York is the oldest organization with which to register a dog, and they accept all breeds of dogs. Gun dog men use the *Field Dog Stud Book* at Chicago, which is a part of *The American Field*.

The cost of registering a dog is very small, and the rewards of the small amount of time and money are very great indeed.

VARMINTS ARE SPORT—from Page 21

kitchen for a night's reloading. Of course, you can reload any shell and some of them are near the ideal.

Our qualifications for a vermin rifle are as follows: A range of 200 yards which covers 90% of all shooting; a group size of not more than 3½ inches at 200 yards; and a trajectory of not more than 4 inches. Anything that cannot come within these limits is distinctly not to be considered a vermin rifle. So let's take a look at some of the favorites and see how they stack up.

First, let's take that popular little 22 Hornet. When in the Forest Service, this was my standby for varmints up to and including bobcats. I had several—a 23D Savage with a 4-power scope and a Sedgely which was very good. The one I liked best was a model 19 Savage with a heavy 28 inch barrel. This gun would shoot right along with the model 70 Winchester. On a still day they would do 2½ to 3 inch groups with a 12½ power Fecker scope at 200 yards. The thin jackets would go to pieces on impact and the light report made it ideal in farming country. The factory cartridge was a bit rough on small game but I had a reduced load that worked out fine. I usually sighted in with a scope so that the point of impact was about 2 inches high at 100 yards. Then I was right on at 170 yards and about 3 inches low at 200 yards. Let me rise in meeting at this point and state that a crow or a groundhog is a right far target. The guy who can take them at this range with any degree of regularity sits up at the head of the class. Anyone buying a Hornet doesn't need to fret about outgrowing it in a hurry.

Ballistics are as follows: Velocity—2650 feet at muzzle; 2080 feet at 100 yards; 1600 feet at 200 yards. Muzzle energy—700 pounds. Trajectory—.8 inches at 100 yards; 4 inches at 200 yards. Wind deflection with a 5 mile crosswind—1.5 inches at 100 yards; 7 inches at 200 yards. Main defect is some wind sensitivity at over 100 yards. Not quite a 200 yard gun but in the heavier models such as model 70 Winchester it comes close without too much guessing. Price of shells runs 8½ cents per explosion. Present crop of rifles are Winchester at \$109.50; Stevens and Savage light weight models in the \$40 class; and a lighter weight Winchester model at \$54.95.

The next on the list is the 218 Bee, made only in the Winchester model 43. It has a little more velocity than the Hornet—2860 feet against 2650 feet with the same weight bullet. It's a better hand-loading proposition than the Hornet and due to the fact that no heavy rifle is made for it, it gives the nod to the Hornet. Wind deflection is a little better than the Hornet but not much.

The new 222 Remington makes a bid for probably the best straight varmint cartridge in the commercial field. I'll not even except my favorite 220 Swift when the cost of a first class outfit is considered. Here is a top flight rifle that can be had with a satisfactory scope sight for \$102. While that ain't hay, nevertheless, it's quite a cut below comparable varmint outfits. While I've not fired this rifle myself, it was thoroughly tried out in the field as well as in the laboratory. Here are some reliable figures: Muzzle velocity—3200 feet at 100 yards; 2660 feet at 200 yards; and at 300 yards it is still going 1750 feet per second. Even more interesting is the mid-

range trajectories—.5 inch at 100 yards; 2.5 inches at 200 yards; and 7 inches at 300 yards. Muzzle energy runs 1135 pounds. Remington says nothing about group size but some unofficial group firing showed 1½ inches at 100 yards with a run o' mill factory rifle. This can be pruned down considerably with the gun properly tuned up. Remington figures show a wind deflection of .8 inches at 100 yards, 1.5 inches at 200 yards, and 3.6 inches at 300 yards. Price of rifle—\$74.95 with ammo at 10 cents per shot.

Now we come to that class of varmint rifles which takes in the "woods loafer" who uses one gun and generally is a reloader. He not only uses it on varmint but on deer and black bear as well. In short he is a one-gun man. These individuals are usually fine woodsmen as well as deadly marksmen.

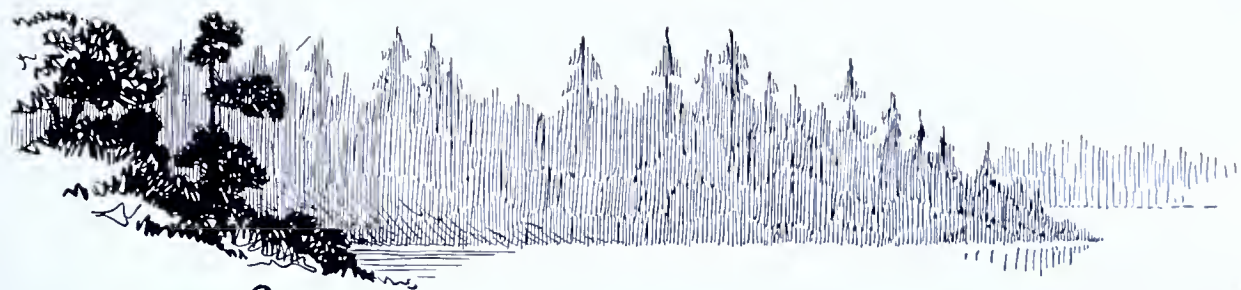
The 220 Swift is one of the most remarkable of our present day rifles. There has been a lot of controversy as to its ability as a deer rifle. All that I will say at this time is that one standing in my gun cabinet has this performance to date: 10 shots—10 deer at all ranges up to 326 paces. But its real mission is to reach out and smack undesirable citizens of our outdoors when they think they are safe. It's a dead sure 250 yard gun with even money at 300 yards if you do your part. A glance at the ballistics tells the story. Muzzle velocity—4140 feet. Energy—1825 pounds. Now look at the trajectory. Midway, at 200 yards—1.5 inches; 3.5 inches at 300 yards. Wind deflection with a 5 miles cross wind—.5 inches at 100 yards; 2.5 inches at 200 yards; and 6.3 inches at 300 yards. Accuracy runs close to minute of angle with a good rifle and good conditions. Defects are: short barrel life (about 2000 rounds); hard to reload, requiring considerable experimentation to get good reduced loads. Best accuracy is with full power loads. There is some trouble with shell necks stretching. Cost of rifle (model 70 Winchester) \$109.50 with shells at 13 cents each.

The cartridge nearest the ideal for the one gun woods loafer in the east is the 257 Roberts. This cartridge was developed as a long range varmint exterminator. It's the reloader's dream, handling a wide variety of loads from squibs to poison on deer and black bear. Ballistics runs as follows: 87 grain bullet . . . muzzle velocity 3220 feet—2770 feet at 100 yards . . . muzzle energy 2005 pounds . . . mid-range trajectory—.5 inches at 100 yards, 2.5 inches at 200 yards, 6 inches at 300 yards. Accuracy runs 1½ inches at 100 yards or better in some rifles. Rifles are Winchester at \$109.50, Remington 721-A at \$74.95. Shells cost about 15 cents apiece.

The 250 Savage is also a hot little number with about the same ballistics and accuracy of the 257 Roberts. The drawbacks lie in its not being made with a bolt action which introduces reloading troubles as well as not so fine an accuracy.

Scopes are a must for this type shooting and should be a minimum of 4 power. Prices of satisfactory scopes range from \$27.50 for a Weaver J-4 to over a \$100 for the higher powers.

This column is intended only as a guide for the beginner and is not a complete survey of the field. There are several good combinations that space does not permit us to discuss. Now, let's all go—but be careful what you shoot at. That "varmint" might be me!



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THE STORY BEHIND THE COVER



For many persons, crow hunting is little more than a thrilling sport. For Pennsylvania Game Protectors shooting and controlling "Old Corvus" is a real necessity if certain areas in Pennsylvania are to produce reasonable numbers of wild game and song birds.

Particularly in June, when crows are nesting and the three to seven fledglings are cawing "hunger," crow control takes on added significance. In its widespread and continual search for food at this time of year, the crow is at his blackest. The feeding on the eggs and young of game birds, the molesting of poultry and livestock, and the raiding of fields of tender corn all overbalance the big bird's few beneficial habits.

Crow hunting for men like District Game Protector George Keppler, Meadville—shown on this month's cover—has become a science. He has learned, like most real crow hunters, that the whole wide outdoors harbors no smarter trickster than "Blacky," the crow. No other bird is so unpredictable in his approach, so difficult to trick into gun range, or so deceptive in flight. Although his top speed rarely exceeds 40 miles per hour, the crow can

dive, zoom, sideslip, and even turn a backward somersault—if his life depends on it.

Thus, crow hunting requires the utmost skill. First, the successful crow hunter must have an intimate knowledge of the bird's habits—where, when, and how to find concentrations of crows. Secondly, the ability to call or decoy the smart birds into gun range is an absolute necessity. And, finally, crow hunting requires the highest skill in handling a gun—in bringing down one of the trickiest aerial targets in all nature.

Game Protector Keppler is a master at all three skills. He not only expertly deploys his pet "crow lure"—a great horned owl called "Open-The-Door Richard"—but also can make his call talk the crow language. This month he and many other guardians of wildlife—Commission employees, sportsmen, and farmers—will be afield reducing Pennsylvania's over-abundance of the "black devils of the skies."

**CROW HUNTING PROVIDES YEAR 'ROUND
SPORT AND IS GOOD FOR WILDLIFE**

PENNSYLVANIA Game News



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TEN CENTS



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WILLARD T. JOHNS, JR.
Editor



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A Declaration of Conservation

If wildlife conservation was only a matter of providing an annual shootable supply of game, the problems facing game administrators would be much easier. Unfortunately, wildlife management cannot be accomplished to the satisfaction of all because of their divergent interests.

Even as the needs and hopes of a great number of different people were resolved in America's great Declaration of Independence one hundred and seventy four years ago, so must our wildlife management and restoration programs or policies be molded today. Present day patterns for conservation programs should be broad enough and flexible enough to satisfy wide differences of opinion just as the famous Declaration adopted on July 4th, 1776 was fundamental enough to guarantee a nation the foundation that has withstood the pounding of time and has gone down in history as one of the most magnificent and practical documents ever written.

To satisfy the desires of hunters alone is not enough. Neither is it enough to fulfill only the hopes of the nature lover. The needs of the farmer must be met while, at the same time, the requirements of the vacation resort owner and his guests must be considered. The amateur bird watcher, the trapper, scientist, housewife, businessman—all who have an interest in wildlife and the great outdoors must be remembered when framing policies or making decisions.

In this Commonwealth it is mandatory that wildlife conservation be for the benefit of all. Even as "pursuit of happiness" was considered a basic right in the Declaration of Independence, so must the right to pursue pleasure in the outdoors, no matter in what form, be safeguarded for our people today.

Conservation, then, becomes a matter of compromise. The demands and desires of many with different interests and objectives must be balanced so that the greatest good can accrue to the greatest number. And since wildlife can mean so many different things to so many different people, balancing the values in a sound conservation program cannot be accomplished with complete satisfaction to all. While our deer, for example, must be maintained in large enough numbers to provide sport and recreation for the sportsmen, the herd must not be allowed to become so large that it will destroy our forests, our efforts toward reforestation, our farm crops, or become a menace to the safety of our highways.

Wise conservation demands careful planning. Selfishness does not belong in the outdoors. Everybody should consider the interests and desires of others. The future assurance of wildlife conservation depends upon tolerance and understanding. There can, and there must, be the opportunity for all to enjoy our wildlife in the way they love to enjoy it.

WILDLIFE BELONGS TO EVERYBODY

WISE CONSERVATION PROTECTS THE INTERESTS OF ALL



Some Mysteries and Marvels of Bird migration

By
WILLIAM C. GRIMM

SINCE time immemorial men have marvelled at the coming and going of the birds, but only within comparatively recent years have we accumulated any amount of factual information concerning their migratory movements. Bird banding, as carried out by Uncle Sams' Fish and Wildlife Service and a host of cooperators, has thrown a considerable amount of light on the subject; and we may reasonably expect that the store of information will be vastly increased with the passing years. Already banding has provided the answers to many unsolved questions, but there are as yet many questions to which we do not have adequate answers.

A bird watcher may observe that a pair of robins builds a nest in a given tree year after year, or that a pair of catbirds nests each spring in the shrubbery at the far end of the garden. Naturally a question arises as to whether the same birds actually return during subsequent years and make their nests close by where they built them before. If he assumes that to be the case, the chances are that he is correct; for banded birds have been known to return for several years in succession to nest in the same old haunts. Sometimes, of course, only one of the pair will return and bring with it a new mate. The other bird of the previous pair may have died in the meantime, or it may have taken another mate and gone elsewhere. Moreover, banding has revealed that birds often winter in a given locality year after year. The pair of catbirds which nests each summer in your back yard may winter regularly in the same Georgia or Florida garden during successive winters. Those slate-colored juncos which you fed at your feeding station last winter will, in all probability, be back again next winter. And this goes for many of the larger birds as well. Blue-winged teal banded in South Carolina during the winter months have been retaken near the place where they were banded during subsequent winters.

Sportsmen are naturally interested in the migratory movements of such birds as the waterfowl. The United States Fish and Wildlife Service has recently issued a progress report on the migration of waterfowl based on an analysis of the banding records. This report shows that the bulk of the mallards, black ducks, green-winged teal, and Canada geese which migrate to the Atlantic Coast states for the winter, as well as some of the blue-winged teal, pintails, and ring-necked ducks, come from the breeding grounds of eastern Canada. Thus the majority of these birds follow either a direct north-south or slightly northeast-southwest course from their breeding grounds to the wintering grounds. There is another route which many species of waterfowl follow from the vast breeding grounds of the Prairie provinces of Canada, and our own north-central states. This route strikes a general northwest-southeast course across Pennsylvania to the wintering grounds on the Atlantic Coast. It is this route which is apparently followed by the bulk of our redheads, canvasbacks, lesser scaups, baldpates, and gad-

walls; as well as a number of the pintails, shovellers, blue-winged teal, and ring-necked ducks. An analysis of the maps showing the dispersal of banded ducks from the breeding areas to the wintering grounds shows that very few of them actually follow a strictly north-south route.

Although a few species of birds are almost strictly non-migratory, many species regularly make long trips between their summer and winter homes. The Arctic tern still holds the laurels as the champion long-distance traveller. It makes the longest and most remarkable migratory journey of any of our North American birds. Its breeding grounds extend from the coast of Massachusetts and the region around Hudson Bay far beyond the Arctic Circle. It winters at the opposite end of the earth, in the neighborhood of Antarctica. No animal on the face of the earth enjoys as much daylight as the Arctic tern. For years it has been known that this bird regularly migrates along the western coasts of Europe and Africa, yet it is very rarely seen along our Atlantic Coast south of the New York region. Now it is apparent that most of the breeding Arctic terns strike an easterly or southeasterly course from the northern parts of North America across the Atlantic to the west coast of Europe; thence following the western coast of Africa to their winter home in the Antarctic regions. It is estimated that most Arctic terns make an annual round trip of at least 25,000 miles. A downy chick which was banded at Turnevik Bay, Labrador, on July 23, 1928, was recovered near Port Shepstone, Natal, in southern Africa, on November 14 of the same year. The trip of between 8,000 and 9,000 miles is the longest actually recorded; and more remarkable still is the fact that it was made by a bird scarcely three months old!

Although the Arctic Tern is the champion long distance migrant, it is not the only bird which makes a long journey each year. Many of our small shorebirds which breed in the Arctic region regularly migrate more than 8,000 miles from their summer homes to their winter homes in South America. For that matter, some remarkably long trips are made annually by many of our smaller land birds. The nighthawk, or "bull bat," journeys as far south as Argentina during the winter months, and some of these birds breed as far to the north as Alaska. A blue-winged teal which was banded at Oak Lake, Manitoba, during the first week of September was recovered near Lima, Peru, during the latter part of the following January. This bird made a flight of over 4,000 miles during an interval of slightly less than five months.

The majority of bird migrants seem to accomplish their journeys in a fairly leisurely manner, but the banding records reveal that at times birds make very rapid flights. The fastest flight thus far

* Leader, Pittman-Robertson Project 42R, Survey of Pennsylvania Mammals (northeast sector).

recorded was made by a mallard which was banded at Green Bay, Wisconsin, on November 23, 1930 and was shot near Georgetown, South Carolina, only five days later. That bird flew a distance of nearly 1,000 miles during those days. Quite remarkable is the flight of a juvenile green-winged teal which was banded on the Athabaska Delta in Alberta, and a month later was recovered about 3,800 miles away at Maracaibo, Venezuela, in South America.

The migration of birds is still cloaked in mystery, however. While we are fully aware that birds often accomplish very remarkable journeys, we still do not know how they are able to accomplish them. Many persons have assumed that birds are endowed with some remarkable and unerring sense of direction. More recently authorities have proposed the theory that birds have long utilized the principles of radar, and are guided by the magnetic fields which surround the earth. The plain fact is that we just do not know. Last spring the Delta Waterfowl Research Station up in Manitoba, Canada, began experimenting with radar. When high-flying, migrating flocks of ducks struck the radar beams, they reacted in a most peculiar manner. According to H. Albert Hochbaum, when the flocks struck the radar beams, they flared and broke, much as if they had been shot; then they regrouped and continued on their way. Only the migrating flocks seemed to be affected by the radar beams; birds which were considered to be natives on the Delta marsh did not respond to the effects of the beam. Further experiments are being planned, both in the United States and Canada, in an effort to wrangle this age-old mystery from the migrating birds.

Another mystery of migration is what inaugurates these migratory movements of birds. One might assume that the coming of winter starts the birds moving south in the fall. Certainly this is not true in all cases, for many birds depart for the south as soon as the breeding season is over and long before there is any premonition of winter. For instance, in Pennsylvania our purple martins and kingbirds depart for the south during the latter part of August or at least by early September. I have noticed that the martins and the kingbirds which breed in southeastern Georgia leave about the same time; in fact many of the martin houses are deserted by the last week in July. Certainly, at that time of year, the coming of winter does not compel the martins and kingbirds



Hal Harrison Photo

Portrait of a wood thrush brings to mind Emerson's words: "Beauty is its own excuse for being."

to leave southeastern Georgia, a region where warm weather normally extends well into the month of November. On the other hand, many of our smaller land birds winter in the tropics where day and night are of approximately equal duration throughout the year and where temperatures remain at a fairly constant level. Just how do these birds know when it is time to commence their journey northward in the spring? The best theory that has thus far been advanced is based upon the rhythmic development of the sexual organs of the birds.

A recent article by George G. Williams entitled "Weather and Spring Migration," which appeared in *The Auk* for January 1950, contains much food for thought. Mr. Williams states that "following the lead of the late Wells W. Cooke, modern writers have had much to say about the correlation of spring arrival dates with average temperatures. But a cursory examination of 'Audubon Field Notes' for any spring would show that, in North America, the spring migrations in general proceed in a series of spurts or rushes correlated with maximum temperatures." This writer offers some very convincing evidence that the birds not only advance or halt their journeys according to daily conditions of temperature, but that they will reverse their migration northward when they unexpectedly encounter cold fronts. Granted that an average date for the arrival of a species can be obtained from averaging the dates of the bird's arrival at a given locality over a long period of years, we should not minimize the fact that the current weather conditions rather than average, or normal, weather conditions govern its arrival during any given year. A warm wave during early March is invariably accompanied by an influx of such early spring migrants as robins, bluebirds, meadowlarks, phoebes, red-wings and killdeers. On the other hand, as most birds students know, very cold weather during the same period just as invariably retards the northward movement of such birds. Anyone who has ever kept migration records over a period of years at a given locality will be able to verify this. Notable waves of bird migrants, throughout the spring season, invariably accompany periods of maximum temperatures.

Mid-April in 1941 was marked by an unusually early "heat wave" throughout northwestern Pennsylvania, during which the daytime temperatures rose to 75 or 80 degrees on several consecutive days. Soft, warm breezes flowed out of the South and life in the marshes about the Pymatuning surged with the thermometer. The foliage developed to a stage comparable to what it normally attains only by early May. On April 18 and 19, I found many Florida gallinules, soras, and Virginia rails in the marshes, although they usually do not put in their appearance before the latter part of April or early May. During those two days I repeatedly heard black-throated green warblers in the hemlock woods,

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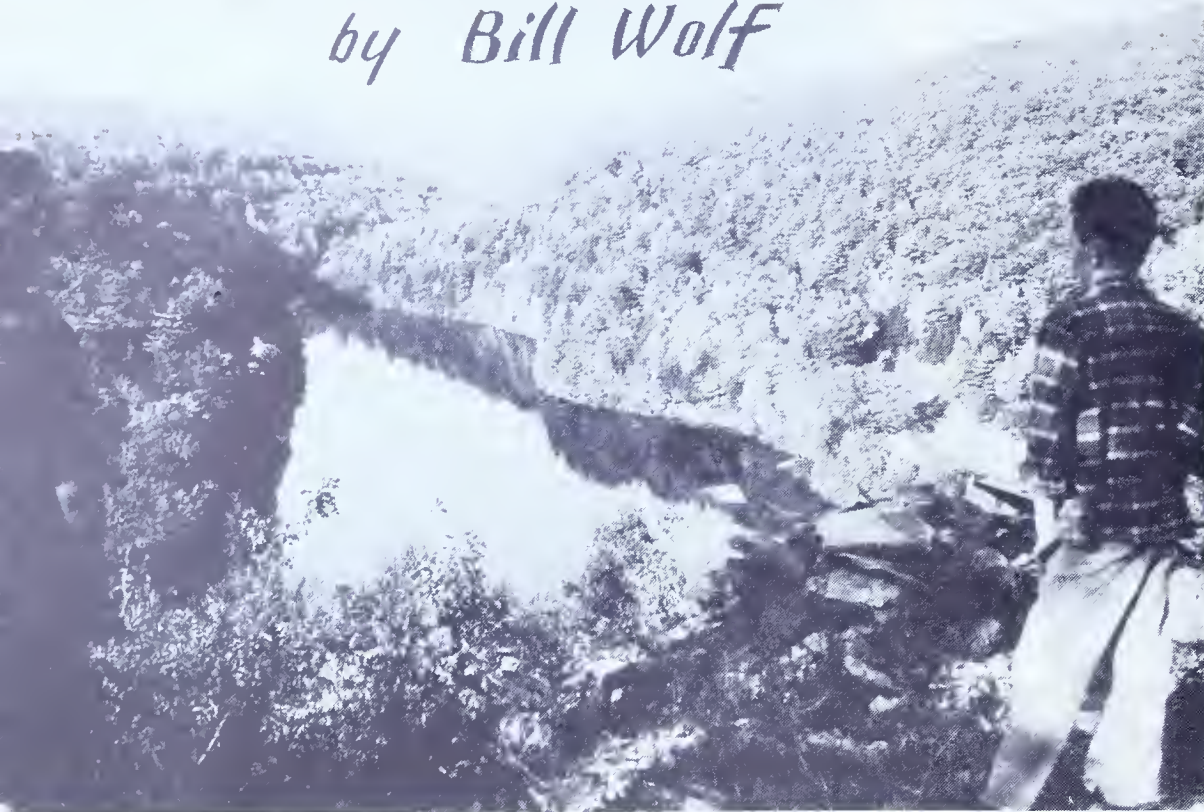


Hal Harrison Photo

Raymond J. Middleton, of Norristown, one of the country's leading bird banders, places a government band on the leg of a towhee which he has just caught in the trap on the ground.

Leave the Wheels Behind

by Bill Wolf



WE LIVE too much of our life on wheels and have lost the art of walking and seeing things as we walk. We start life on the wheels of a baby carriage or a stroller. Then we graduate to tricycles, bicycles and roller skate wheels. Next, we roll along on the wheels of automobiles. Trains, buses, trolleys, subways and elevated lines carry us in public transportation—still on wheels. Even our last trip is made on wheels. But feet were invented long before wheels and provide a peculiar form of locomotion known as walking! It's the only way to get where wheels and horses cannot take you.

And this is the walking season, a time to be out and enjoying the things that are outside our cities. Fortunately, Pennsylvania has much to offer the person who will get off the highways. And, also fortunately, no one need travel far to see much in this State if the eyes are used as well as the feet.

For example, a man living on the outskirts of Philadelphia took a walk one morning in a cornfield near his home. Hearing an unusual sound, he investigated and came face to face with two deer, a buck and a doe! This was only eleven miles from the heart of downtown Philadelphia, third largest city in the nation. Such an instance is relatively rare, of course, but deer do exist almost next door to any city in the State, and they can be seen by anyone who goes looking for them. So can many other forms of wildlife, and some of the loveliest country this side of Paradise.

A natural question arises: Just how does the person who is not too experienced in the outdoors go about getting next to nature? What should such a person look for, and, having seen it, know what he has seen?

There are several basic things that we would advise for the nature hiker. One is, go alone or with one companion at the most. Group hiking may be all right when it comes to visiting scenic or historic spots—but a crowd of persons tramping over trails is not likely to see much in the way of wildlife. Even birds, which are ordinarily friendly

and curious, are apt to shy away from humanity en masse. Sometimes the solitary fisherman is startled to hear the sound of many voices and the tread of many feet disturb the quiet of the woods and stream. It is caused by a group of hikers, and the fisherman can't help but notice how wildlife vanishes before the sound. Birds move on to some other spot. Squirrels flatten out on limbs, where they can see without being seen. Frogs plop into the stream. Turtles slide off logs and disappear beneath the surface.

The second thing is to go equipped for walking. This does not mean fancy equipment is required. A pair of sturdy, comfortable walking shoes and plain overalls or blue jean pants are as good as the fanciest outfit. Supplement them with white woolen socks—even in summer heat—and a flannel shirt. These will soak up perspiration and be much more comfortable than lightweight materials. A small knapsack will carry all the lunch you need. A compass is useless unless you know how to use one.

The third item ties in with the statement about the compass: Try to follow a stream on your walk if you can. In the first place, it's almost impossible to get lost walking along a stream. If you go downstream, you need only walk upstream to return to your starting point, or vice versa. There usually is a path beside every fair-sized stream in Pennsylvania. It has been beaten there by the steps of many persons who have gone before you. First, wild animals and then Indians wore it down. Then came the pioneers, the settlers and farmers and finally the sports fishermen. All walked beside the stream for the same reason as the one that applies to you—walking is easiest there since stream bottoms are ordinarily level.

Best of all, most wildlife lives beside or near water. It is as necessary to their existence as to yours. Food and cover grows thickest near water. The streams themselves contain a variety of food for the creatures that prey on aquatic life.

Let's assume that you are ready to take a walk beside one of Pennsylvania's farm country streams. This most likely will be your choice because there are so many of them near the cities and towns in which you live. Just what can a person expect to find along them?

Well, the first striking thing will be the profusion of plant life. Few streams are farmed right down to the banks. Even in heavily settled farm areas, the streams are wild things, resisting the hand of man and ready to return at a moment's notice to a state of nature. Alders and willows join roots to hold the banks together, and, wherever the plow or cattle are not factors, a rank jungle of weeds, grape and wild cucumber vines grows up.

Sometimes the stream flows through woodland and here the banks are much more likely to be clear of lush underbrush. This is where the walker probably will see gray and red squirrels, especially if some of the nut trees which provide part of their food, grow near the stream. Everyone knows them. The small but aggressive red squirrel may challenge an intruder with his whirring war cry. The gray may be seen as a flash of movement in the green leaves—or you may see him cross the stream by an aerial bridge, leaping from a tree on one side to a tree on the other.

If you hear a noise like a Halloween rattle, that's a kingfisher, swearing at you because you have disturbed him in his fishing. A kingfisher is easy to recognize. He is a handsome bird of blue-gray color and with a sharp pointed beak. He usually sits on a limb over the stream, watching fish much as a cat watches mice. You may be lucky enough to see him plunge into the water and emerge with a fish. If it's small, he will fly to a limb and swallow it. If large, he may bang it about on rocks to subdue it before having lunch. Holes in the clay banks are homes for the kingfisher families.

The stream itself holds a wealth of wildlife. Walk quietly beside it, avoid talking and avoid heavy walking that will send warning vibrations to all things in the water. Then, perhaps, you will see a muskrat feeding in the slow streams of the farmlands. Look far ahead for signs of disturbance on the water. If you spot such, approach cautiously. Take a roundabout route and come back to the stream where the commotion was observed. Perhaps a muskrat caused it in its search for vegetable matter on which to dine. Maybe you will surprise a family of wild ducks because black and mallard ducks often nest on Pennsylvania streams. At this time of the year the ducklings will be colored tan much like their mother and getting to be big children. If very lucky, you may see a mink doing its own fishing. Mink remind the observer of slim, dark-coated snakes with legs as they flash in and out of the water.

Speaking of snakes, you might as well realize at once that you undoubtedly will see some along the streams. This is fortunate, because snakes are as interesting as any other animal and your chances of encountering a poisonous species are not one-tenth as

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"WILDLIFE PHOTOGRAPHY"

By DON SHINER



An interesting study of a fawn of the whitetailed deer.

A PLEASURABLE event has a way of dissolving from memory when the excitement's over. The tug on a line in a rushing trout stream, the rustle of wings as a bird is flushed, the grace and beauty of a deer bounding for cover, a hen pheasant as she gathers her young together—all are gone in a moment.

A picture record of these events can keep them all for you. You get double pleasure, you have your outing and the pictures too. It adds a new dimension to your activities and doubles the fun. Such is wildlife photography.

And shooting pictures of wildlife is as fascinating as actually shooting game with a gun. Not only does it give a keen sense of satisfaction to bring home some prize winning shots, but every species of game can be shot with a camera the twelve months of the year! There is no closed season for the camera and the various seasons of the year, with their changes of scenery, add to the variety of pictures obtained.

Only a few pieces of equipment are necessary for this picture hunting. Number one on the list is the camera. Select this piece of equipment carefully. Choose one that has a range of shutter speeds, an adjustable diaphragm or iris and requires focusing.



Another item of importance is an exposure meter. This instrument measures the amount of light reflected from the subject. By making a few simple adjustments, the exposure can be calculated for the picture at hand.

A flash-gun outfit will be handy too. This is a case which houses flash light batteries and fires a flash bulb in synchronization with the camera shutter. In this way you can supply your own light for night pictures or it can be used during the day to eliminate shadowy areas.

The wildlife photographer will find that a telephoto lens is a great help, for this makes it possible to take pictures of animals at a considerable distance. It is rare when the photographer can get very close to game unless he has previously built a blind and has waited silently within until the game appears upon the scene.

Still another piece of equipment that the sportsman will find important is a tripod, or some device whereby the camera can be held perfectly still when taking slow exposures. The woodlands are generally shaded areas and therefore a fast shutter speed can not be used or the picture will be under exposed.

Stalking game has always been quite a game in itself. Game must be fairly close in order to give a clear picture. Too often the picture seeker goes afield and upon spying a deer some 500 yards distance, takes the picture, later proudly pointing to the pin point speck on the picture, exclaiming it is a deer.

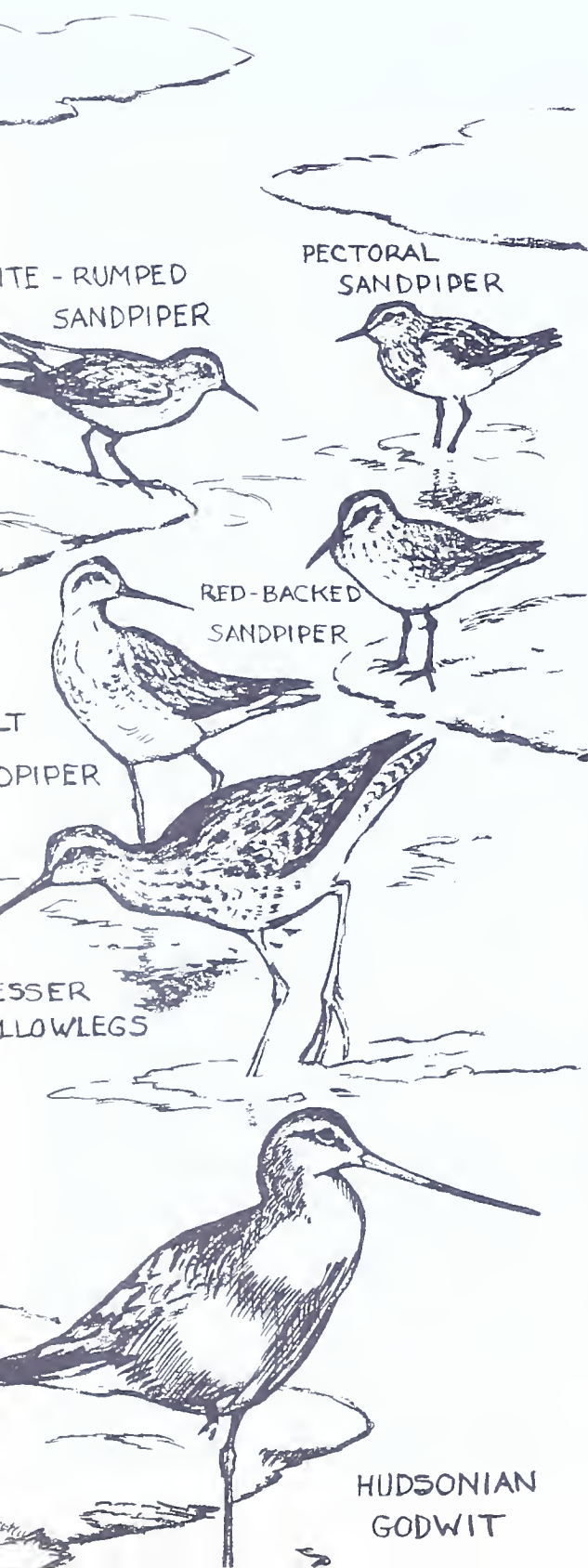
One can not use the same technique when hunting wildlife with a camera as is used when hunting with a gun, for the gun sights are often set 100 or 200 yards and the photographer must work many times closer. This is often difficult, although it can be overcome if range and habits of the subject are known thoroughly before hand.

One of the best methods is to conceal yourself in the path when the quarry will presumably take and wait for the game to come into the camera range. Deer often have a regular grazing place, or water hole, which they frequently visit. This is an ideal location to set-up and take a few shots when the animal comes in view. Rarely are any close pictures taken of deer, or any other wildlife creature for that matter, by the hunter when walking through the woodlands, camera in hand.

The use of blinds is often employed. Like those used when duck hunting, blinds are merely shelters to hide the photographer from view. They should have large openings thus allowing the camera to swing in a wide angle, because one never knows exactly where the animal will appear.

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The raccoon is one of the most humorous of all animals to photograph.



SHORE BIRDS ON

A THICK, pearly mist enveloped the flats, covering the backwater like a blanket. It pressed down over the shallow pools which glistened dimly in the filtered light. Ceiling was sub-zero. These were the Tinicum marshes, a wasteland stretching from the southern airport to the Delaware River; mudflats, pockmarked with tidal pools, jungles of high pampas grass, acres of lush tules, threaded with sluggish streams. The yellowing interwoven reeds were splashed with cotton white from the bursting brown cylinders of the fall-touched cattails.

In winter the home of foraging rough-legged hawks and short-eared owls, fall brings flocks of migrating shore birds to these flats, almost within the metropolitan limits of the country's third largest city. We were there early on this misty morning to observe their flight, the young military naturalist and I.

With a whirl like the rattle of a giant deck of cards, ghostly shapes slanted in through the fog. Darting, swerving, sharp-angled wings stabbed blurringly through the mist from all directions. Already dim shapes, hazily mirrored in the still pools, were visible, balanced in one-legged stilt attitudes or picking their way over the flats in the bobbing conga-step peculiar to the sandpiper clan.

October is shore bird month along the Pennsylvania-New Jersey coastal flats and few places afford such chances for close observation as the isolated dike-bordered backwashes of the Tinicum Flats. Bulldozers coughed and spluttered from the background fog, audible indications of work on the new landing strip. Even when the mist had

somewhat lifted the birds paid little attention to the noisy diesels. As I have often observed on the coasts of Maine and Massachusetts, fall migrating shore birds show little fear of man, which, of course, explains the extermination of our Eskimo curlews.

Here at Tinicum the sandpipers' close association with man was apparently doing them no good either, for many of the peep and yellowlegs were obviously groggy and a dozen or more feathered bodies fringed the pools. The brackish Delaware River water is filthy at best and the shallow, muddy depressions must have held a mixture of pollution and sun-rotted vegetation that had to be tasted to be believed. We saw one bittern back in the marshes so oil-drenched that he could hardly fly; so entirely blackened that, through several minutes of observation, we thought it must be some remarkable melanistic phase. Much oily waste from surrounding refineries seeps, or more probably is dumped, into many of the small waterways that stretch like veins through the reedy flats. It is probable that some form of botulism was affecting the shore birds, who were accepting the City of Brotherly Love's rather doubtfully hospitable invitation to "set and eat."

We watched about two hundred birds concentrated in shallow, water-logged mud flats, possibly five acres in area. One great rarity was among them, a big Hudsonian godwit. Hudsonians probably take an ocean route in fall migration, from Nova Scotia to the northern coast of South America, for there are few records along our coast of this handsome wader with the long, upturned bill. In fall the rich brown and black breeding plumage has been replaced by a pale



THE TINICUM MARSHES

greyish-buff. When he flies, however, his white rump, black tail and very dark wing linings are unmistakable field marks. Lesser yellowlegs were the most numerous among the larger birds. Several stilt sandpipers were among them and to observe the latter standing next to a yellowleg gave an excellent chance for comparative identification. The stilt sandpiper is a slimmer, slightly paler, grey bird and his bill is longer and more slender than that of the yellowlegs. The latter's namesakes, his bright yellow underpinning, are, of course, diagnostic. But, in some lights the legs do not look yellow, so it is well to be familiar with other field marks. The stilt's legs are olive green and his bill is noticeably longer than his head.

Pectoral, white-rumped and red-backed sandpipers made up the group of medium sized waders. The pectorals were the brightest in color; they do not take on their winter plumage until they reach South America and these birds passing through Pennsylvania wore their brilliantly speckled chestnut, grey and black coats. The dark neck and upper breast is abruptly contrasted to the whitish underparts and shows (in the males) traces of the sac- or flap-like quality which it possesses in breeding season, when it is inflated to such proportions that it puffs out to twice its normal size in front of the courting cock bird. The red backs were all in fall plumage—stocky, grey birds with heavy bills, slightly decurved. The white rumps looked greyer than the pectorals; their bills are shorter than the red backs. When they fly, their snowy upper tail coverts are conspicuous marks of their breed.

Of the peep, semi-palmated sandpipers were the commonest. We saw several western

By JACOB BATES ABBOTT

sandpipers with them, identified by the much longer, stouter bill, curving a little downward at the tip. Only a few of the darker least sandpipers were present. Small flocks of dainty little semipalmated plovers, looking like diminutive killdeers, picked their way along the muddy deltas.

One knot, in the barred, grey fall plumage, appeared among the other waders. As big as a lesser yellowlegs, and more stoutly built through head, neck and shoulders, he held aloof from most of the others. When we first saw this finely-barred, all grey sizeable shore bird with its straight black bill, it looked very much like a wandering tattler which we had both often seen on Pacific Coast beaches. Such a record of wandering, however, was not to be, for when the bird flew he showed a white, barred rump and upper tail. The tattler has no white patches at all.

Two Wilson's snipe flushed from the base of a grass-fringed dyke and darted off into the fog in their erratic, zigzag flight. They appear very dark in comparison to most of the shore birds and the dull yellow double V on their backs is a noticeable field mark.

A couple of chunky eastern dowitchers appeared, probing along through the muddy shallows, their long bills buried for two-thirds of their length. These "robin snipe" or "German snipe" of the oldtime gunners, when in flight point their bills downward like woodcock and snipe. They are rarely found in freshwater meadows; coastal beaches or brackish backwaters are their favorite haunts.

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SEMI-PALMATED PLOVER

WILSON'S SNIPE

BLACK-BELLIED PLOVER

GOLDEN PLOVER

KNOT

DOWITCHERS



the CROW

friend OR foe

By DEAN LESNETT
DISTRICT GAME PROTECTOR

THE CROW, one of the highest types of birds in regard to intelligence and body conformation, is found throughout most of the world. Through the years it has been persecuted constantly by man, but due to its resourcefulness and cleverness, it has continued to thrive.

Crows are of the same genus as are ravens and rooks. The general term "crow" sometimes is applied to these close allies as well as to the entire family Corvidae which includes the jays and magpies besides the crows.

The early settlers in this country learned that each Indian tribe had a name for the black bird, and today it is one of the best-known birds in America. The large size of the bird, its glossy-black plumage, and raucous call readily identify it.

Today, wherever the species is discussed, whether by ornithologist or sportsman, the emphasis is invariably on the degree to which the bird should be controlled. The general, unqualified opinion is that, where there are lots of crows, there should be something done to cut down their numbers. Where the birds are concentrated, as is the case in their winter roosts, one gunner can bring down as many as five hundred in a day and is looked upon as a friend by the neighboring farmers who suffer extreme crop damage especially to corn. The crow thrives in agricultural areas and ranges as far north as there is cultivation. Overlapping of the crow's ranges with the waterfowl breeding areas of the Prairie Provinces, has caused serious destruction of eggs and young of the waterfowl by the crow.

Both male and female crows are entirely black. Their long pointed wings are much longer than their tails. They molt after the breeding season and don a glossy black winter plumage. Crows are about twenty inches in length and weigh about one pound.

Everyone is familiar with the bird's unpleasant, harsh cawing. Its courting song is a rattling noise. Young birds calling for food sound very much like adult birds making love calls.

The adult crow is very wary and untiringly vigilant in his fight to survive. Never is the crow above being suspicious of anything that may indicate the presence of his chief enemy, man.

Crows held in captivity have been known to reach an age of twenty years, but the average age of the wild birds is four years.

Among their enemies are the large hawks and owls. Many smaller birds attack and harass them but do them no real harm. Epidemics of tuberculosis and roup have often caused great suffering among the crow population. Many are the other diseases to which they are susceptible. They commonly harbor lice and ticks. Quite often they will die of starvation in sub-zero weather due to blindness caused by the freezing of the corneas of their eyes.

Crows characteristically gather in large communal roosts in the winter months but separate into pairs during the breeding season. During the winter months they feed primarily on fish and mollusks, which is the main reason their roosts are located near rivers or other waters that may not be frozen over all winter. These winter roosts are usually composed of three groups of crows; those that live in the vicinity all year around, those that have migrated in from the north, and those that are just resting while passing through to the south. Many crows have been massacred while in these roosts, by bombing, gunning, trapping, and poisoning.

Although all hunters and farmers think of the crows as thieves and scavengers, they are faithful and tender in their home life. In the breeding season in the spring after much noisy courtship, the crows pair off and scatter out over a large breeding area. Both male and female assume equal responsibilities in the selection of a site and the building of a nest. The site is picked with much thought to a favorable food supply close at hand; invariably in good farming country. The male helps bring in twigs, mosses, reeds, grasses, feathers, twine, hairs, rags, etc., which the female arranges into a nest. The nest is about nine to ten inches deep with some of the base twigs as large as one quarter inch in diameter. The nesting cup is about four and one half inches deep. The number of eggs in the average clutch is from four to six, and the male often helps in the eighteen-day incubation period. Both parents feed the young. Young birds open their eyes on the fifth day and at four weeks of age they start standing on the edge of the nest. Around the fifth week they can make weak flights.

The feeding habits of the crow are varied. Over two thirds of animal food, or about a fifth of the whole diet of the crow, is composed of insects, and these include many of the most destructive pests with which the farmers have to deal. The crow is primar-

ily a terrestrial and omnivorous feeder. Its share of insects, therefore, is made up almost exclusively of species found on or near the ground, or those which it secures from beneath the surface by turning over sticks, clods of earth, or dung. Under normal conditions, adult crows glut themselves eight to ten times daily. Immature birds need to eat about half their own weight in food each day. The size and voracious appetites of the birds make them especially valuable when one or another of the insects upon which they feed is overabundant.

Because of its depredations on small wild birds and its destruction of the nests and eggs of larger game species, the crow has received the condemnation of bird lovers and sportsmen throughout the nation. While stomach examination has, to an extent, verified this accusation, it has at the same time disproved extravagant statements. About a third of one percent of the annual food of the adult crows and one half percent of that of nestlings is derived from wild birds and eggs. About one in every twenty-eight adult crows and one in every eleven nestlings examined had eaten such food. In the case of the nestlings, however, this ratio gives an exaggerated idea of the work done, as in many instances several members of a brood had fed on parts of the same victim. Many of the birds that lose their eggs to the crows in early spring still have time to lay another set of eggs that will be little molested by the crow, whose nesting season is then over. Nevertheless, on game farms and preserves, and in suburban districts where it is desired to foster small birds, the crow population must be held in check.

The cases where large pastures are revived by the reintroduction of crows to save the grasses from root-destroying grubs, or a cornfield is rid of cutworms by the insatiable birds, are examples of good crows in action. Such cases of extreme crow benefits are few in comparison to the harm done by the birds in the over-all picture of their feeding habits.

Western crows, which have the worst reputation, will frequently invade a nearby field of watermelons and ruin the crop, just to save themselves the trip to a distant watering place in the evening.

The Department of Agriculture in a survey of Canadian duck-nesting marshes in proximity to crow abundance in agricultural areas, reveals that the crow depredation on

Crows lay from four to six very pretty greenish eggs splotted with brown.

eggs under these highly adverse conditions is as high as thirty-one percent of the season's laying. Some provinces in Canada pay, or have paid, bounties of as much as three cents apiece for crows and one cent for each egg.

As a carrion feeder, the crow ably supplements the good work of the turkey vulture, especially along river banks and tidal flats. But from its carrion-feeding habits, the crow has been accused, and justly so, of being a potent agency in the transmission of livestock diseases, especially hog cholera. However, by the immediate burying of the dead bodies of the diseased animals and the employment of rigid sanitary measures in the outbreaks of this kind, the incentives which usually attract these birds may be eliminated.

Over half of the vegetable food of the crow is corn, which they favor most when it is "in the milk," sprouting, or in the shocks. Fruits, such as apples, pears, figs, and cherries are eaten and injured to a minor degree. Some wild fruits are taken, but the seeds of many are not destroyed in digestion and the crow is an important distributor of such noxious plants as poison ivy and poison oak. In this work, however, it is only supplementing the activities of many other native birds which feed on these seeds often to a far greater extent than does the crow.

Many and varied are the "frightening devices" used to act as "scarecrows." Farmers have used the straw-stuffed human effigy, although it oftentimes fails to fool the sharp-eyed crows. Various unusual objects, as pieces of shining tin moving in the wind or glass bottles hung about fields, windmills operating a noise-making mechanism, newspapers placed on the ground, twine stretched about and across fields from poles stationed at intervals around them, as well as bodies of dead crows hung in conspicuous places, have been successful in some instances. At times farmers spread poisoned-soaked corn about in a newly planted corn field in order to discourage the crows from picking or pulling up the young corn. Strychnine is the most common poison in which the corn is steeped to make this bait. Little if any results are obtained by steel trapping of these birds due to their large numbers. Charges of dynamite and T.N.T. have been set off in the roosts which have massacred countless thousands of crows in areas where the farmers are plagued with the birds. Fire crackers and Roman candles have been set off among the concentrated birds, and in some cases proved to scare off many of the crows. The many and varied crow calls being sold on the markets today are helping to increase the interest in the up-and-coming off-season sport of crow shooting, which is encouraged by nearly all conservation organizations, game departments, and especially the farmers.

The crow is a bird whose size, ability to survive under diverse environments, and almost omnivorous food habits make it capable of doing both serious harm and extensive good. Local conditions, however, greatly affect its economic status, and for this reason hasty judgment as to its worth should not be rendered, lest the birds be persecuted in sections where it is actually aiding the farmer.



At one week old, baby crows are ugly looking critters.



A nest of five baby crows just about ready to try their wings.



WOODCHUCK STRATEGICS

By FRANK J. FLOSS

THE Pasture Pig, Woodchuck, Groundhog, Mountain Whistler, or whatever other regional name you know him by, is by preference one of my favorite game animals, even though to many he is just a noxious pest. I like to hunt the woodchuck, because then I can roll up my sleeves and go hunting when surplus clothing such as gloves, hunting coats, and boots, have been cast aside and forgotten. If you have never hunted our summer game animal, the woodchuck, you have a thrill coming to you. Try it! Once you experience the freedom of being able to throw your rifle to your shoulder, and have it settle itself snugly there without being hindered by heavy clothes, you will be convinced.

But, that's not all that can be said for the woodchuck. He possesses other qualities too. He is tricky, fast on his feet, and a hard target to see or hit. Usually you never know what he is going to do, or where you will see him. He may give you a one shot kill at 50 yards, a running shot at a 100 yards, or you may sight him at 400 yards and have to use all the stalking know-how you possess to get a shot.

My favorite outfit for hunting him is an old pair of brown slacks, a pair of moccasins, and an old sport shirt. The only extras I carry are a pair of field glasses, and a large red bandanna. I use the field glasses to look over likely looking holes before I approach them. The bandanna is for my own protection. I either tie it around my head or wear it around my neck cowboy fashion, and it's worn so that other hunters can tell the difference between me and a woodchuck.

Just what rifle you will use is up to you, for he can be hunted with anything from a 22 long rifle, to a 30-06. However, if you have some spare wampum in your pocket and want to buy a rifle designed for woodchuck and vermin hunting, there are several on the market to choose from that have proven themselves deadly at long ranges. In this class is the 22 Hornet, 218 Bee, 219 Zipper, 22 Savage High Power, and the 220 Swift. Take your choice.

The 22 Hornet shoots a 45-gr. bullet at a velocity of 2,650 feet seconds. It will kill regularly at 200 yards; however, it performs best up to 150 yards; beyond that point the 45-gr. bullet is effected by cross winds.

The 218 Bee shoots a 46-gr. bullet at a velocity of 2,860 feet seconds and has good accuracy up to 125 yards; beyond that range it too is effected by cross winds.

The 219 Zipper shoots a 56-gr. bullet at a velocity of 3,050 feet seconds and it can be depended on to connect at ranges up to 200 yards.

The 22 Savage High Power shoots an old cartridge, but it still proves its worth on woodchucks. It shoots a 70-gr. bullet at a velocity of 2,780 feet seconds and it too will hold its accuracy up to 200 yards.

And last, but by far not the least, we have the super accurate 220 Swift, which drives its light 48-gr. bullet at the enormous velocity of 4,140 feet seconds; it has a very flat trajectory up to 300 yards.

There are several ways to hunt woodchucks. Hunters of the old school use what is termed "sitting them out." In this they pick out a hole that shows a lot of use; then sit down some distance from it and wait for their woodchuck to come out. There is a thrill of anticipation connected with this type of hunting. You never know just when the woodchuck is going to come out of his den. Sometimes they will come out minutes after you sit down and at other times they may tease you all afternoon by sticking just their nose out and never coming out where you can get a shot at them. If you like to sit while you hunt, try "sitting them out." But for safety's sake remember that other hunters may be in the vicinity, so wear something red on your head so that you will not be mistaken for a woodchuck. A red hat or a red bandanna on your head will do the trick.

I for one do not care much for sitting them out. For I'm one of those restless cusses who likes to keep moving. I much prefer to hunt my woodchucks Indian Style. In other words I hunt from den to den. This is done by first scouting the territory you are going to hunt in and picking out as many dens as you can find, then stalking one den after another. This method is much more thrilling for your woodchuck has as much of a chance of seeing you first, as you have him. This way of hunting also increases your chances of getting a woodchuck. For while "sitting them out" you have only one chance at one woodchuck, but by

hunting them Indian style you may get a chance to shoot at several, depending on the number of dens you visit.

If you have never tried stalking woodchucks you have been missing something, and it's not hard to do, for it's just a game of hide and seek. Here are some hints on how to go about it. When possible use trees, rocks, grass, or deadfalls to screen your movements from the woodchuck. Always pick out the closest object from you and move to it as fast as you possibly can, but move only when your woodchuck is feeding with its head down or when it is looking away from you. Never move while it is looking in your direction or when it has its head up. Be careful where you step for any noise will attract the woodchuck's attention to you. If your quarry does look up while you are in the open moving from tree to tree, or rock to rock, stop dead in your tracks and don't move until it puts its head down again.

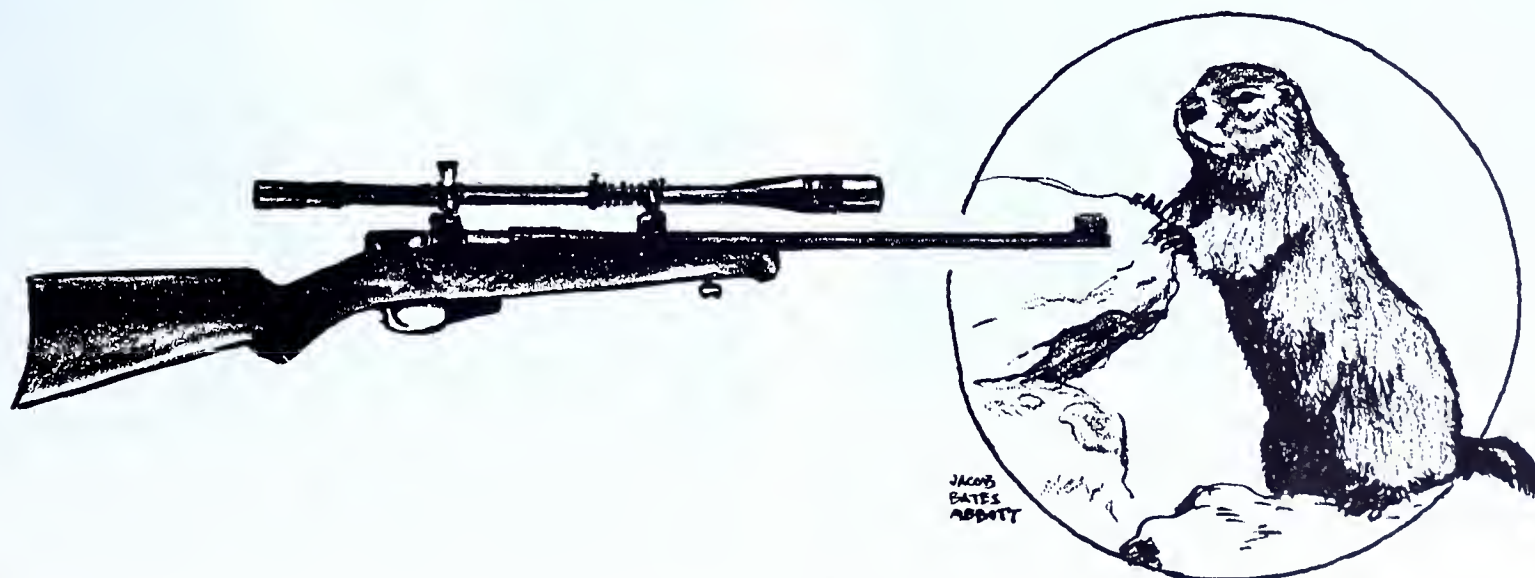
And above all, when stalking, work against the wind, never with it. Either have it hitting you full in the face, or either side. If you try to stalk a woodchuck with the wind at your back, you will telegraph him that you are after him and he will dive in his den before you get a shot at him. Even when you can't feel a breeze use caution when stalking, for oftentimes the breeze may be so slight that you can't feel it, yet be moving enough to carry your scent to the woodchuck. On what appears be a calm breezeless day make a wind test before you start your stalk. Just put one of your fingers in your mouth for a few minutes, then pull it out and hold it up before you and if there is a slight breeze astir the side of your finger from which the breeze is coming from will cool first. From that you can tell which way your scent will travel and plan your stalk accordingly.

I know many things have been told about just what a woodchuck will and will not do when hunted. Some are true and some are false. For example, many will tell you that woodchucks only come out of their dens during certain hours of the day, and it's useless to hunt them at other times. Don't believe them. I've hunted them from sunup to sundown and I've seen them afield during all those hours. I've even shot them

in a summer rain storm. They have no certain hours when they come out; they come out when they get the urge to feed, sun themselves, or play, regardless of what time of the day it is. The sun does not have to be shining to hunt them either; they will come out on dark days too. It's just a question of being at the right den at the right time. When a woodchuck stays in his den for four or five hours at a time during the day it's not because he is lazy or sleeping; it's usually because he was scared into it by some other animal or another hunter. Usually they are in and out of their dens all day long.

However, stalking and getting a woodchuck in your sights is not all there is to hunting him. Where you hit him after you do shoot him is important too, for he can carry a lot of lead. If you do not hit him in the right spot, he will crawl off and die in his den. I know that no good hunter wants that to happen, so place your shots carefully. Don't shoot for his body; try to place your shot in the head where one shot will kill instantly. Shoot for the woodchuck's ear and you will be sure of killing him instantly or missing him clean. And do make allowances for windage if the day is windy. On such days the added pressure on the side of the bullet from which the wind is blowing will cause your bullet to drift from your line of sight. If this happens when your hog is standing on all four feet you will hit him in the body and not come near his head. This usually results in a wounded woodchuck so watch your windage and make the click corrections on your sight for it. Also do not shoot at a woodchuck if he is too close to his den, or if he is standing on the mound of dirt that is always found at the entrance of his den; he may fall and roll right down into the den where you may not be able to pull him out. Most woodchuck dens drop straight down for several feet or so; therefore if you shoot your woodchuck when he is standing or sitting near the opening of his den he will nine times out of ten fall into the den, where you may have trouble getting him out. If and when you do shoot a woodchuck and he does fall into his den and you can't see or reach him,

(Continued on Page 31)

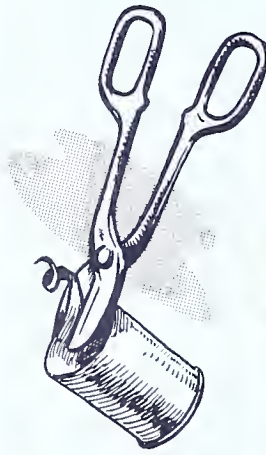


Do It With a Tin Can

BY JOHN E. HARNEY



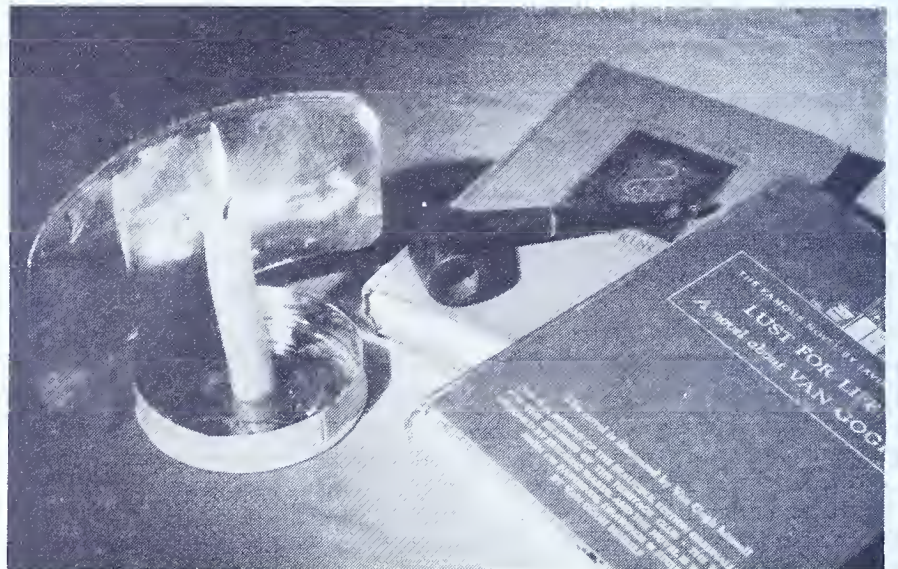
An empty can, a pair of metal shears, paint, indelible ink—and a useful gadget can be fashioned easily for camp, cottage, or home use.



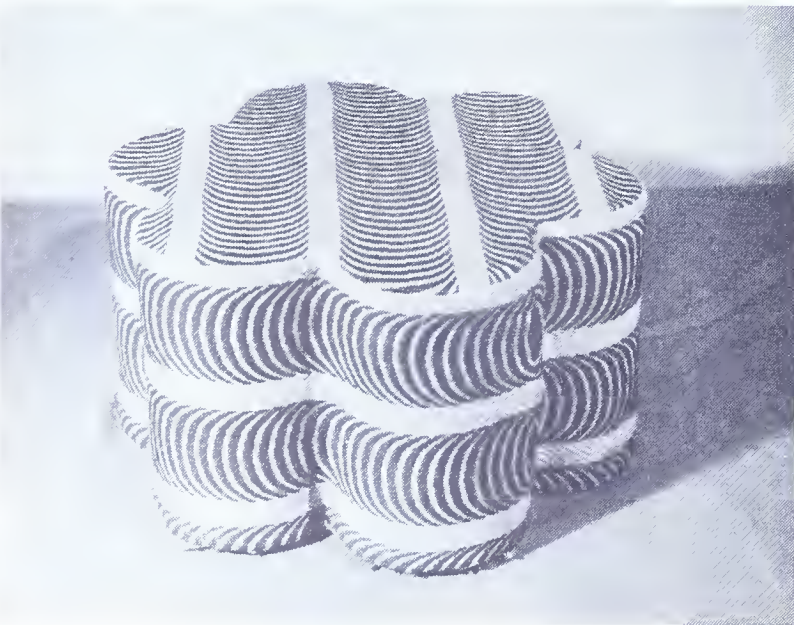
The fireplace scoop was made of a large tin can, to which is attached a wooden handle.



Ash trays can be personalized by club or camp insignia.



Every hunting camp or summer cottage should—and usually does—have an old tin can converted into a candle reflector.



Seven large fruit juice cans, soldered together and covered, make an attractive foot stool for the kids at home or for Pop at the hunting camp.



An old tobacco can becomes a handy pocket first aid kit for the outdoorsman.



OUTDOOR KIDS

By HAL. H. HARRISON

BILLY had tricked her and Jane thought he was a pretty mean brother.

Along the roadside, she had spied this lovely rose-purple flower growing at the top of a tall, leafy green stem. When she showed it to Billy, he asked her to pick it for him.

When she reached for the stem, she pulled her hand back quickly with a cry of "Ouch." Billy started to laugh.

"What is so funny?" Jane wanted to know.

"Well, I guess that's one way of learning what a thistle is," Billy replied, a grin still crossing his face. "Thistle leaves are just covered with sharp, thorny spines," he added.

"Yes, smarty, I found that out already," Jane retorted.

The variety that the children had found was the common or bull thistle, one of the largest of the family, which includes the Canada thistle. Even the green envelope below the flower of the common thistle is covered with needle-like spines. The flower itself is soft and sweet-smelling. All day long the bumblebees and butterflies visit the thistle to take its nectar. One butterfly, the "painted lady," is also called "thistle butterfly." The webs of its caterpillars are found often on the prickly leaves.



The Canada thistle, considered a farm pest, spreads rapidly. It is taller and more branched than the common thistle. Its flowers are similar but smaller.

Thistles belong to the composite family, called "the world's leading flower family," for it has members all over the world. Some others in this big family that are well known are dandelions, daisies, asters, sunflowers, golden-rods, chicory and Joe Pye weed.

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AMERICA'S NUMBER ONE GUN

By ED SHEARER

JULY ushers in vacation time and millions of Americans will be moving outdoors to mountains, lakes, and streams. Hunting camps will be reclaimed from pack rats and other squatters and the hunt for America's most numerous quarry—the tin can—is on.

Here comes into its own the world's most popular gun—the 22 caliber rimfire. It leads the sale of any other gun or caliber by far. More boys and men have fired their first shots at game or target with the modest 22 caliber than all the rest of the world's firearms combined.

Competition is keener among factories manufacturing this gun than any others. In the cheaper models there is a very small margin of profit. This is the only gun that can be had commercially in any action and price your fancy may desire. Single shot, falling block, bolt action, pump action, lever action, semi-automatic—the 22 has them all. You can have a long barrel, short barrel, light weight, heavy weight gun or anything in between. Any type of individual, male or female, can find in this gun exactly what they want at a price they want to pay, both for gun and ammunition.

Going back into the history of metallic ammunition, the 22 is the only rimfire cartridge (with the exception of the 25 R. F.) that was made a century ago. It is paradoxical that it is far more popular today than any other caliber. No outdoorsman's or explorer's outfit is complete without one. The gun had its origin in Europe from the little BB cap which was used in the Flobert rifles so popular in this country in days gone by.

The first real advance was made by Smith & Wesson in the era following the close of the Civil War—the 22 short rimfire. This was shot in a single action revolver. This cartridge was developed into a very accurate indoor target performer and came into its own in the Schuetzen Clubs before the turn of the century. If I recall correctly, Harry Pope told me that his famous "Dog Fight" gun used this cartridge. That gun made history and launched Harry on his career of the world's premier rifle maker.

The standard velocity of low speed 22 shorts give a 29 grain bullet a speed of 965 foot seconds. The high speed load gives 1125 foot seconds with the solid and 1155 foot seconds with the hollow point bullets which weigh 27 grains.

The 22 long was sort of a makeshift, being little better than the short and far behind the 22 long rifle and lacking the accuracy of both. In high speed ammo it gives a 29 grain bullet a velocity of 1240 foot seconds. There is little excuse for this shell and it will probably be taken off the loading list of all companies in the near future.

The 22 caliber of today was born with the appearance of the 22 long rifle cartridge in the 'eighties. It was loaded with black powder and the bullet was uncrimped. This seating gave so much

(Continued on Page 30)

BUYING A DOG

By HERBERT KENDRICK

MANY many sportsmen do not have the time to develop a young puppy into a finished gun dog, therefore it is necessary for them to purchase a mature dog that is already trained for the field. This process is filled with about as many hazards as rearing the pup, because unfortunately some kennels and dog dealers are dishonest. Perhaps they are no worse than any other class of men who buy and sell live animals.

In all the field magazines many dogs are advertised for sale by publishing a picture and stating the great qualifications, and quite often the faults are omitted. To me it has always seemed that dogs are not adapted to mail-order business, so it is far better to visit the kennel to purchase a desired animal. First, decide the breed and sex of dog you desire, then check with dependable dog men and have them recommend the proper seller. Next, write to him stating your needs, and if he has a dog that he feels will suit you, by all means make the trip to the home of the dog and have the handler take him into the field where you are able to judge for yourself the dog's pace, nose, style, endurance and ability. There you will see him operate under normal conditions where he is unaffected and unafraid. If you are not satisfied with the performance and the dog owner has no others to offer then repeat the process at some other place. It will be worth your time and money to be sure. However, if the action of the dog is acceptable to you, buy him and take him home, but be certain you have made a friend of him before going afield. He may leave you or he may refuse to work for you. This does not mean you have made a mistake in the dog. It is perfectly natural for him to miss his former master, yet if treated kindly and friendly it is amazing how well adapted he will become in a short time.

If it is an impossibility to visit the kennel when you buy and you are dead set on ordering a dog, call the owner by telephone clearly stating your choice, and be sure to know you are understood. Then have him write you a concise description of the dog, his work in the field, and send a recent photograph along with a copy of his pedigree. Insist on the dog being sent on a ten day trial basis. In other words, place the money in the hands of the express agency when the dog is received, keep him a few days, give him a thorough but fair workout, and if you are satisfied instruct the express agent to send the money to your seller. If the dog has been misrepresented then you have a right to return him and your money is refunded. If this be the case your only loss is the charge of shipment.

Buying a puppy is a much more simple transaction. Here you select the very best breeding you find offered—close your eyes and hope for the best. If you can visit the kennel to select the puppy you will select the healthiest looking one who warms up to you at once. Picking the best of a litter is often more luck than judgement and skill. Too often we find the sickly ugly runt of a litter

(Continued on Page 30)



Game Commission Realigns Field Divisions and Districts

For years, the Pennsylvania Game Commission has administered its field operations through seven field offices. Four were located in the northern half of the State and three in the southern half. They were identified by the letters "A" through "G," which did not define the territories and caused much confusion.

On June 1, the Game Commission put into effect its plan to reduce the field divisions from seven to six by dividing the State into six fairly equal areas. They will be known as: Northwest, (10 counties) with headquarters at Oil City; Northcentral, (10 counties) headquarters for the present at DuBois; Northeast, (13 counties) headquarters at Forty Fort; Southwest, (10 counties) headquarters at Ligonier; Southcentral, (11 counties) headquarters at Huntingdon; and Southeast, (13 counties) headquarters at West Reading. The Williamsport office will be closed.

The Commission will administer the 33 northern counties from three division offices in the same manner that the southern counties have been administered from three offices for many years—and at a substantial saving to the Game Fund.

Effective June 1st, municipal lines became the boundaries of Game Protector's districts and each protector's territory will lie completely within one county. This will result in simplification of records and a clearer definition of the territory to the public at large.

These changes will not affect the number of Game Commissioners or the area from which they are appointed. Each of the eight Commissioners will continue to be appointed from the geographical section of the Commonwealth provided by law and will serve on a statewide basis.

In connection with the abandonment of Division "C", headquarters at Williamsport, effective June 1, the Game Commission announced reassignment of the personnel as follows: Robert E. Latimer, formerly Division Supervisor, will become Waterfowl Coordinator for the Commonwealth. He will be



Robert E. Latimer

Robert Latimer Appointed Waterfowl Coordinator

In line with plans to expand its waterfowl program, the Commission announces the appointment of Robert E. Latimer, Muncy, a former Field Division Supervisor, to the newly-created position of Waterfowl Coordinator. This action, effective June 1, follows closely a recently completed two-year waterfowl study, conducted by members of the Commission's Research Division, for the purpose of developing a more comprehensive statewide waterfowl program for Pennsylvania.

Mr. Latimer's services will be devoted to selecting, improving and developing suitable waterfowl habitat throughout the Commonwealth in order to attract and increase present waterfowl populations, thereby furnishing better sport for the migratory bird hunters. "Bob," as he is familiarly known to his host of friends and acquaintances, is well qualified for this important assignment, being one of the Game Commission's Quarter-Century employees. He is an ardent outdoorsman and during World War II served as a commissioned officer in the U. S. and Asiatic Theaters with the Army Air Forces.

responsible for the development of wild waterfowl habitat, the purpose being to provide additional feeding and nesting areas which will increase Pennsylvania's waterfowl population and provide better sport for gunners. LeRoy Gleason, Wildlife Protection Assistant, will be transferred to the vacancy in the same position in the Northcentral Division, DuBois headquarters. John S. Shuler, Conservation Education Assistant, will be assigned to the same position, now vacant, in the Ligonier office, Southwest Division. John R. Gehron, formerly Land Utilization Assistant, will be assigned to a district in need of a Game Protector. Mary Ellen Crumbling, head stenographer, will be transferred to the Harrisburg office, pending satisfactory arrangements, to fill an important vacancy there.

The Game Commission announced these additional personnel changes: Richard W. Orr, formerly Wildlife Protection Assistant at the DuBois office, will remain at that Northcentral Division headquarters, DuBois, but has been reassigned to the position of Conservation Education Assistant. F. E. Jenkins, formerly Conservation Education Assistant at the Ligonier division office, has been reassigned to the position of Land Utilization Assistant, Southcentral Division, headquarters at Huntingdon.

Song Bird Booklet Reprinted

The popular pamphlet titled "Attracting Birds" has been reprinted. It may be obtained from the Game Commission's Harrisburg office free of charge.

These subjects are treated in the pamphlet: How to attract birds; homes for birds (with 3 pages of bird house sketches and instructions on how to build them); and caring for birds in winter.

Members of bird clubs, nature lovers, Boy and Girl Scouts, and many others will reap valuable information from this pamphlet.



Didn't

BY ROE M

To paraphrase a popular song, "Spring Spring came to Pennsylvania. The snow gobbled their mating call, flowers bloomed

Anglers, fishing Lyman Run, Nine Mile (but a few streams) found sections of Pottsville OF ROTTING DEER CARCASSES prevailing in woods.

Most persons would like very much a rare disease—like Virus X, Y, or Z. Why? Because heavenward, completely absolved of blame. How do we know? Because we examine

Despite the preceding antlerless season, certain sections of the state. Shrinking funds, like Pilate's, were washed to escape squeamish. In her inexorable way she sought enough food.

But, on the other hand, Nature was kind. Early in the year provided hundreds of tons of open winter permitted the animals to winter

It is significant that in the areas where damage. Therefore, little or no feed. In Berks County, District Game Protectors reported remainder of these two counties and portions of Jefferson, and Centre found 158 starved

The herd in the rest of the state fared better where ice storms prevailed, more food was present, only 129 were found by District

Don't get the idea that only 498 deer died in Pennsylvania last winter. This number is not found and reported. Many more lie in the streams from the trout streams.

We can't depend upon having an ice storm an open winter next year. Without these heavy take of all deer, many whitetails will

Who should utilize these deer? The hunters, self-foraging dogs, or the carrion eaters

The Commission's proposal is the only catastrophe. Reduce the deer herd by hunting

Starvation and stream pollution.

The last crumb was gone from the table.

Starved venison for vultures.

A last feeble attempt

ing e To Them

2 McDOWELL

ken a little late this year." But, eventually,
eed, ruffed grouse drummed, turkey toms
was pleasing to the senses. Or was it?

at, Cushing Run, Kettle Creek (to mention
enty extremely unpleasant. THE STENCH
ver the pleasant aroma of the northern

tribute the death of so many deer to some
Because then they could roll pious eyes
es face facts. *These deer starved to death.*
ay of them. That's how we know.

unters didn't remove enough deer from
e "slaughter of the innocents" too many
ublic censure. Nature is neither soft nor
the problem of too many deer with not

the animals neglected by man. Ice storms
free top browse to the deer herd. A fairly
about and feed from this supply.

many deer died there was little or no ice
ern McKean County and western Potter
dead deer this spring. Protectors in the
the counties of Clearfield, Cameron, Elk,

s.
better. There,
fewer deer are
r Protectors.

n starvation in
ents only those
oled ravines far

or upon having
factors, *plus a*
next winter.

e, the packs of
forests?

to prevent a
—not by star-



The cruel result of inadequate food.



I was too small to reach food.



death by starvation.



Nothing left in the forest but death.

Let Mother Do The Job

Game Protectors are laying in large stores of headache medicine these days. The reason: This spring and summer many Pennsylvanians—most of them kind-hearted and well-meaning—will “mother” so-called “lost and abandoned” wild creatures by taking them home. In fact, the “adoption” business has already begun. The Game Commission therefore issues its yearly admonition: *Leave wild birds and animals where you find them.* The Game law, it is noted, says that this “saving” can be “spending,” for it may affect offenders’ pocket books.

A wobbly-legged fawn deer is not “lost”; its mother is feeding nearby or the approach of humans has frightened her away. Those who “just must cuddle” a cub bear come upon in the woods should consider the power-packed fury of its mother. Uninjured young squirrels or raccoons nesting in a den tree that has been felled will be found by mother and carried to a new, natural home after humans have left the area.

Persons who pick up wild birds and animals actually are inhumane. After hand-raising, some wild creatures become so tame, so incapable of self-care, they must live thereafter penned in zoos, never again to know the freedom of the wild.

Wildlife administrators realize that there are rare exceptions to the “leave them alone” rule. Here are two cases in point: A doe deer is killed on the highway, leaving a fawn too young to fend for itself, or a mower kills a female ringneck on her nest of eggs. In such cases, the District Game Protector should be notified at once. He will appreciate such assistance and will take charge, or advise disposition of the young or eggs so left.

In all other instances wild creatures and their offspring or eggs must be left where found. Their natural forebears will take far better care of them than human foster parents ever can.

Predacious Snakes

Game Protector Albert Kriefski, Lewisburg, Pa., reports that on the 22nd of April he found a ringneck nest containing 9 eggs. On the 6th of May it held 24 eggs. When Kriefski returned on May 8th to observe the nest he found all of the eggs gone. Neither broken shells nor signs were present to indicate what had taken the eggs. Investigation disclosed two large pilot black-snakes nearby. The officer felt quite sure that these egg thieves provided all the answer he needed.

A large and widely diversified wildlife conservation exhibit sponsored by the Pennsylvania Game Commission opened at Hershey Park Zoo in mid-May. The exhibit, housed in the former reptile house, is free of charge and already has drawn thousands of visitors. It will be open for the entire summer and features museum-type displays of many game species, birdlife and bird houses, albino animals, and conservation practices on the farm.



Ten Ways to Prevent Woods Fires

Farmers and landowners may keep their own woodland acreage from being added to the total of 30 million acres that probably will be burned this year by following ten precautionary measures recommended by the U. S. Forest Service, according to the Wildlife Management Institute. The rules are simple and the methods recommended are neither costly nor time consuming. If followed, they may save the landowner from heavy financial loss.

Recommended protective measures are:

1. Plow fire lanes from 4 to 6 feet wide between your woodlands and adjoining woodlots and keep them clean. If the timber holding is large, break it into 20- or 30-acre blocks separated by fire lanes.
2. Cut or plow under dry weeds and grass on open strips around forest edges and along roads and railroads adjoining or crossing the property.
3. Build firebreaks by hoeing lanes down to bare soil around any sawmills, cottages, frame buildings or other structures in the woods to prevent spread of fires. Picnic spots, in particular, should be given this treatment.
4. Be certain that tree tops and limbs left by loggers are cut and broken into small pieces and scattered over the ground to hasten decay.
5. Clean up debris and trash that might constitute fire hazards about buildings.
6. Keep fire-fighting tools available and in good condition. Hoes, rakes, axes, shovels, water buckets, and "fire swatters" made of 10- by 18-inch strips of belting fastened to hoe handles should be kept at a convenient central location or in strategic caches through the woods.
7. Keep wells clean and in good repair. Provide dipping places in streams or arrange for a water supply in barrels in or near the forest. Barrels of sand kept near buildings are useful for combatting small fires.
8. Know the telephone number of your local fire warden or fire department and keep it posted within easy reach of the telephone.
9. Work out a mutual fire prevention program with your neighbors.
10. Obtain and use posters from your nearest state, federal, or local forest officer or from the U. S. Forest Service, Washington 25, D. C., to warn visitors and workers against carelessness with fire.

Seventy-five percent of the timber holdings in the United States are in small blocks averaging only 62 acres in size and owned by some 4,200,000 individuals. If even one in ten of the owners would take these precautions, the cumulatively staggering loss of timber, pulpwood, wildlife, soil fertility, and stream productivity which the nation suffers each year could be reduced materially.

"As straight as the crow flies" is a well-known saying, but crows don't fly that way. Their flight pattern is usually zigzag.

An enraged elephant will fell a man with his trunk, gore him with his tusks, trample on him, then fling the body 75 feet or more away.



Applicants for taxidermist permits who took a thorough examination under the supervision of the Game Commission at Harrisburg, on June 10, were: Mrs. Janet Rupert, Export; Ralph Reynolds, Titusville; Donald A. Vickey, Wesleyville; Earl R. Donahue, Home; Charles F. Ness, York New Salem; Steve Banik, Spangler; Gerald J. Grantz, Allentown; John Kitner, Dillsburg; and Arthur A. Dongilli, Vanmeter. Results of the examination were not complete when this magazine went to press.

Insects Developing Immunity to DDT

War-developed DDT, hailed in the press a few years ago as the answer to all problems stemming from noxious insects, is losing its effectiveness against some important pests, the Wildlife Management Institute reports.

Strains of houseflies and mosquitos which are resistant to the insecticide have been reported from many parts of the world. After control operations cease, swamps or marshes sprayed appear devoid of mosquitos. Freed of competition from less fortunate members of their tribe, however, the few immune survivors present breed and multiply until, in many places, they predominate. Ten times the amount of DDT needed to curl the toes of an ordinary *Aedes* fails even to stagger these hardy super-skeeters. Heavy applications of DDT had little effect in controlling large swarms of mosquitos at Cocoa, Florida, this year although spraying operations had been highly effective for five preceding years, the Department of Agriculture states.

HOW MANY DEER A MINUTE?

To all those who spent long hours with slide rule or figures after reading the lead article by Wilbur M. Cramer in the June issue, we owe abject apology. The photo title for the article should have read "140 Deer a Minute." Pennsylvania hunters rang up a modern day record on the one-day antlerless deer season in 1949 by bagging 84,121 deer at a rate of 140 per minute. In the one-day season of 1947 the rate was 106 per minute.—The Editor.

LEGAL DUCK KILL IN 1949 ESTIMATED AT 18.5 MILLION

The liberalized migratory waterfowl hunting regulations in effect during the 1949-50 shooting season raised the legal kill of wild ducks by 1.5 million, Director Albert M. Day of the Fish and Wildlife Service announced recently.

Based on an analysis of data gathered from 87,127 bag checks and 25,600 post-season hunter contacts, the wild duck kill index figure for the United States during the past hunting season was 18.5 million birds. The index for the 1948-49 season was 17 million.

Although the number of hunters declined about 10 per cent to 1,676,400 in 1949, Mr. Day declared that in addition to the increase of 10 days in the length of the shooting season, hunters had greater hunting opportunity because large flocks were concentrated in the steadily diminishing areas still suitable for migratory waterfowl. Also, millions of ducks and geese remained in the United States during the mild fall instead of wintering in Mexico or other southern points, which is their normal procedure.

The Atlantic flyway States had 12 per cent of the hunters and 12 per cent of the kill. In 1948 they had 13 per cent of the hunters and 10 per cent of the kill.

The short-eared owl contradicts about every popular concept of owl traits and habits. It frequently hunts its prey in broad daylight, almost never perches in a tree, and prefers open fields and marshlands to the woods.

The peacock is a native of India where it is held in great reverence by the Hindus.



Again man's self dedication to speed and progress has brought death to our wildlife. Early in May, eleven pheasant chicks met their death when they became trapped in newly poured tarvia on Wilson Street in Pottstown. Attempting to follow their mother across the freshly tarred stretch of road, the little chicks, not more than a few days old, bogged down in the surfacing. When the birds tired from their struggles to free themselves, they collapsed on their sides. The sticky "goo" permeated their feathers and sealed them to the roadbed. They were discovered by Richard Burton of Pottstown, who returned home to tell his grandfather of his find. The grandfather, Percy Ricketts, then called me. When I arrived, two of the chicks were already dead and I had to destroy the other nine since they were completely covered with the fresh tar and beyond saving. The mother hen watched us at a distance of about 30 feet.—Deputy Game Protector Richard Blair, Pottstown.

This spring a farmer in Springfield Township noticed that his flock of chickens was slowly decreasing in numbers. One day, after he noticed a particular choice hen had disappeared, he decided to make an investigation and find out the reason for his losses. He suspected a fox so he took his shotgun along, just in case. A short distance from the house, he saw a pile of feathers; farther along, another pile, and he was soon heading for an old sawdust pile about a half mile from his house. As he approached, he saw a red fox, just out of range. The fox saw him and disappeared. A minute later the man got

another glimpse of the fox, but it was still out of range. When he got to the sawdust pile, he saw what had happened to his chickens. Around one of the several holes in the pile was a bunch of feathers, and, listening, he could hear sounds which indicated that there were young foxes inside. About the same time he looked up and got another glimpse of a red fox sneaking through the brush just out of range. He took off after the old fox and followed it quite a ways, getting an occasional glimpse of it, but always out of range. He soon tired of this game of hide and seek and decided to go home, get a shovel and dig out the young foxes. In this way he would break up the little family and maybe stop the raids on his hen house. Accordingly he went home, got a shovel, and returned to the sawdust pile. He started to dig and after moving much sawdust found the nest. But no foxes. Then he thought maybe they were in another hole and he started to dig there. No luck! After trying several holes and moving much of the sawdust pile, it slowly dawned on him that someone was being tricked. As he rested, he reconstructed the episode like this: The female fox pulled the "wounded bird act" on him to lure him away from the nest and, being successful in this, had somehow deducted that the man would come back later for the kits. She then moved her litter of little foxes to some other safer spot. Experience is a wonderful teacher, the man must have thought as he trudged homeward.—Game Protector Clair Dinger, Albion.

A local Forest Ranger whose activities are confined mostly to work on the Shade Mountain Range advises me that during last summer and fall he observed a ringneck cock bird on this mountain top. This spring the same cock bird, presumably, is observed again—this time in company with a ringneck pheasant hen. The mountain has an elevation of 2,000 feet and has the usual assortment of mountain flora such as blueberries, scrub oak, pitch pine and laurel. It is difficult to understand why this bird should remain in an area decidedly foreign to his normal range.—District Game Protector Clarence Walker, Beavertown.

I had a recent report from Game Protector Mace that a Screech Owl was nesting in one of the wood duck boxes on State Game Lands 182. I searched the area and found the owl in the box. She had a brood of three young which were about two weeks old. While I took several pictures, the mother bird never left the box. As could be expected, I found a flicker in the box and the young owls were really enjoying it.—Conservation Education Assistant Roy Trexler, Reading.

During the second week in April a young college student was driving over Tussey Mountain when a grouse suddenly flew into the car. He stopped and picked up the apparently dead bird and put it in his trunk. Upon arriving in Huntingdon he was told by his landlady to bring the bird right to me. My wife answered the door and told the boy to put the bird on the porch until I got back to headquarters. Well, when the fellow went back out to the car and opened the trunk lid, the much alive grouse whizzed out past him and is by now well beyond the city limits.—District Game Protector Dean Lesnett, Huntingdon.

Deputy Mentzer reports that a mother groundhog is doing more than just talking to help her country in these perilous times. This groundhog has crawled up into the working parts of a tank stored at the Letterkenny Ordnance Depot and has built a nest there. She has given birth to four young groundhogs. It is not known just how long it will take this strange crew to learn to operate their tank—Game Protector Ed Campbell, Chambersburg.

While driving on Route 220 in April I was following a car which was moving at a moderate speed. Then I saw two grouse feeding or getting grit on the road ahead of us. The car killed both birds—and a motorist got some hunter's legal daily bag limit seven months too early. The same evening I was called out for a deer killed on the highway. On the way to pick up the dead deer, I fell behind a car for a short distance. In a few hundred feet of travel I saw a rabbit running crazily in the lights of the car. Needless to say, one dead rabbit. Neither of these drivers made any effort to avoid this game, ease up on the accelerator, or even blink the car lights to give the rabbit or grouse—next year's hunting—a chance to save their lives.—District Game Protector Robert Benscoter, Laporte.





I had a recent complaint about a raccoon from a night club on the Steubenville Pike within the Pittsburgh city limits. This animal got into the building through the basement and would climb up the inside of a partition onto the first floor. When the owner and his wife first saw it, they thought it was a rat. It would come into the bar during closed hours, climb up on the bar and walk the full length of it, leaving it covered with muddy tracks. It had been seen several times during business hours and would come up an air space from the basement into the orchestra pit. Here it would poke its head through the curtain which covered the front of the orchestra pit, where it was in full view of nearly half of the patrons. The coon never caused any real damage except to raid the bread box. It wouldn't eat a part of a loaf of bread but would tear off the wrapper of a whole loaf and eat it. What made the wife of the owner of the establishment real mad was when it got into a bucket of lard or "fryings" and then walked over the stove causing a pretty bad mess. I trapped the animal and it is now a resident of Beaver County. I think the raccoon had been held in captivity by someone but escaped. It was a very poor looking specimen.—Game Protector D. W. Heacox, Clinton.

Many a flier lost in a storm has probably wished for the instinct and sense of direction which our migratory birds possess. However, even these birds meet more than their match at times. For instance, on April 20 at 2:00 A. M. during a very heavy rainstorm, I received a call from a helpful sportsman that ducks had landed all over the highway in the Bear Creek-Mountain Lake section and were causing considerable commotion. Due to a heavy fog, passing motorists were having difficulty in distinguishing the ducks on the road. I drove to this area immediately and found that the information was correct. Several ducks had already been hit by cars and one bewildered mallard hen was still waddling down the center of the highway reluctant to leave the area illuminated by the headlights of my car. When the car came quite close to her, she would fly about 30 feet and again alight in the center of the road. She did this each time the car approached, then finally flew off into the night. The following day Deputy Lopsansky picked up a Holbell's Grebe which had injured its wing. Apparently the storm had forced down several flocks for three species were found—Black Ducks, Mallards and Grebes.—District Game Protector Stephen Kish, Moosic.

The following incident was related to me by Gene Fritz, a cooperator on Farm Game Project 150. While out plowing, he observed what he thought was a groundhog in a wheat field, but it appeared to have a white spot on its head. Upon closer examination, it turned out that it was a groundhog with a can wedged tightly over its head. The man removed the can and the animal wandered off. It was quite wobbly and must have been having "tin can" trouble for several days.—Game Protector E. W. Cox, Meyersdale.

Early in May a motorist came to my door and reported that he had killed two turkeys with his automobile. Upon investigation I found that he had killed the only two gobblers in a flock I had recently observed feeding. Luckily another gobbler was secured the following day to put with the hens in order to insure mating.—District Game Protector Robert Bencotter, Laporte.



On the first day of the past deer season, Deputy Greene and I were patrolling Warriors Ridge west of Huntingdon, and in the course of the patrol checked a deer that was most unusual. The buck boasted a six point rack and was in fine condition but he must have been somewhat handicapped in eating. The right horn was normal but the left horn had grown down along the head and into the mouth with the point of the main beam tight against the upper jaw.—Deputy Game Protector Walter Thomas, Huntingdon.

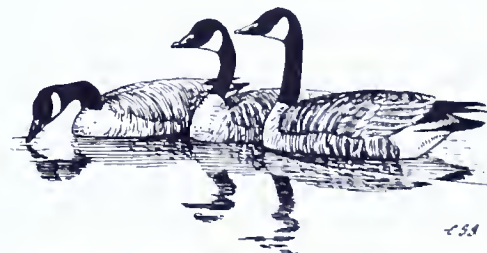
Two pairs of wood ducks did not lose any time in moving into the nesting boxes erected on State Game Lands 183 this spring. On April 19 one box was observed to have 10 eggs. On April 22 another box held 11 eggs. The first ducks were noticed around the area about the 10th of April.—District Game Protector Duane E. Lettie, Honesdale.

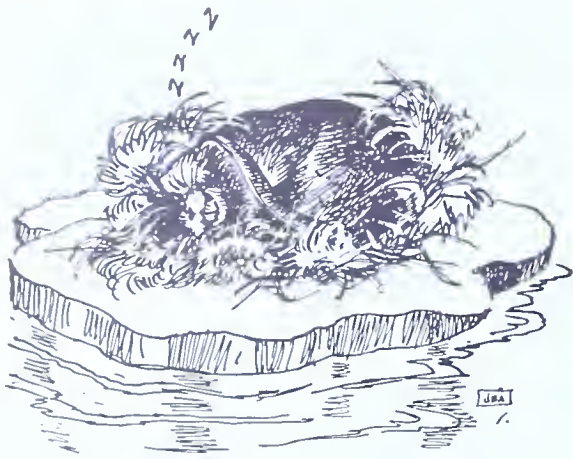
Recently several fishermen came to my headquarters to report that they had found a dead animal in Dunhams Run, Southwest Township, Warren County, which they were unable to identify. Several days later, I patrolled up this stream and found this mysterious animal. It turned out to be a chow dog. What I believe attracted this dog to such an isolated spot was a dead deer on up the stream which showed evidence of being partly devoured. What made the dog so difficult to identify was a combination of porcupine quills in the face, which certainly gave it a grotesque appearance and no doubt was the direct cause of its death. Also, it had been lying in the water for some time, which increased its size completely out of all natural proportions.—Game Protector Sam Shade, Oil City.

Evidently we did not kill enough deer last season. The farmers in this area are reporting that from 14 to 40 deer pasture in their fields continually. From what I can see, I believe we have just as many deer as last year at this time. It will probably take several seasons like the last one to put the deer herd in proper balance with its natural food supply.—Game Protector George Burdick, Tidioute.

A complaint was received in January that sea gulls were creating an unsanitary condition at the Reading Filter Plant. The City water supply is drawn through screened conduits from Lake Ontelaunee and many small fish pass through the screens to end up in the settling basins. These basins are not covered and are separated by 36 inch concrete walls. At times you may see a dozen gulls on these walls, waiting for a choice fish to swim by. The excretion of the birds spread on the walls makes the place very unsightly and is certainly very unsanitary. The plant foreman is trying to discourage the practice by using calcium chloride.—Game Protector Joe Leiendecker, Reading.

Proof of the value of the farm pond to wildlife was evident in this Division during April at a farm in the vicinity of Dawson, Fayette County. Here 17 Canada geese stayed for almost a month before leaving for parts unknown. The geese would go out in the morning to nearby feeding grounds and return to the pond at night to rest. Their presence was enjoyed by many people who had never had a chance to get a close-up view of the great northern honker. Give wildlife the environment that it needs and more people will get the chance to see what it looks like.—Conservation Education Assistant Francis Jenkins, Ligonier.





During March I received a call from a woman in Topton telling me that a muskrat had fallen into her fish pond and might drown. The pond was the small backyard type, about eight feet in diameter and three feet deep. Upon arrival I found the animal asleep and very much alive. The muskrat used his head by building a nest of moss and grass on a raft of ice that was afloat in the pond.—Game Protector Stephen Mace, Fleetwood.

While traveling along Route 284 in Pine Township, Lycoming County, a deer came out on the road ahead of me. I saw it was pretty wet and seemed to be about all in. It went just a short way up the road again and jumped down over the bank into a creek which was very high and swift. I stopped to see what was going to happen to it. All you could see was just its head out of the water and it was putting up a hard battle to get out. Finally, it was washed about 75 yards down stream and into still water where it managed to get its front parts out of water. It lay there for a few minutes; then got to its feet and trotted off into the woods.—Game Protector Bob Sinsabaugh, English Center.

On Monday afternoon, January 9, while I was driving in Piatt Township on Route 220 between Jersey Shore and Linden, I noticed several hen pheasants come up over the river bank and pause before starting to cross the road. I stopped my car to let them cross, as did several other people, and when I saw how many there were, I started to count. There were thirty-two by actual count walking across the state highway and into a corn field just beyond. One of the birds got caught in the fence and after I released it, it continued along its way.—Acting Game Protector Russell L. Thomas, Williamsport.

While patrolling near Reidsburg with State Trooper Jim Straab in November, we heard a queer sounding noise in the brush. Upon investigation we found a small collie pup in a nest. The pup was about two weeks old and was as fat as it was long. We inquired at the nearest farm and found that this was one of the pups of a second litter that a wild female collie has had. Last year the female had nine pups. We looked, but could find no traces of any more pups.—Game Protector Fred Servey, Jr., District F-20, Clarion.

About 8 p.m. the first night of deer season two young lads walked to the back of the house where I was busily engaged in hanging up illegal deer. One of them said, "Hello, Bill" and I returned their greeting. They stood around for some time but I thought they were just interested in watching our activities. Finally one of the boys walked up to me and said, "I would like to take out a search warrant for my brother who is lost." This was a new one for me and certainly a new reason for obtaining a search warrant. Needless to say, no warrant is necessary in a case like this. A search that night failed to find the boy's brother but we did locate him early the next morning.—Game Protector Bill Overturf, District F-13, Marienville.

Ed Wolfe of Kittanning reported that during the months of March and April he counted 91 freshly killed rabbits on the highways while making his daily route of 100 miles.—Game Protector W. J. Brion, Kittanning.



Many of our sportsmen and lovers of the outdoors have numerous hobbies. Several weeks ago I visited the residence of Mr. Tom Swartz of Bowmanstown and learned that he collects deer antlers as a hobby. Tom has plenty of evidence to prove that the Pennsylvania whitetail buck loses his antlers each winter. He confines most of his antler hunting to the rugged Carbon County deer country and most of his trophies are found after the close of the deer season along deer trails. Tom has found several pairs of antlers lying together, while on other occasions he finds a single antler and makes another trip to that locality to attempt to locate the other antler. The color of the antlers coming from near Hickory Run State Park are very light and highly polished, evidence of some mineral deposit in the ground. Tom showed me two sets of antlers which he found in the same locality two years in succession. The porous end or base which fastens to the skull of the deer was identical on both sets, and I was firmly convinced that the two sets of antlers came from the same buck. Since the porcupine is very scarce in this section, an antler may lay in the woods for several years. Porcupines are very fond of deer antlers and will make short work of one when they run across it.—Game Protector Glenn Kitchen, Weatherly.

Turkey calls of various kinds are used by Pennsylvania hunters in their efforts to lure wild turkeys, but during the past season the most unusual of all unusual turkey calls got results.

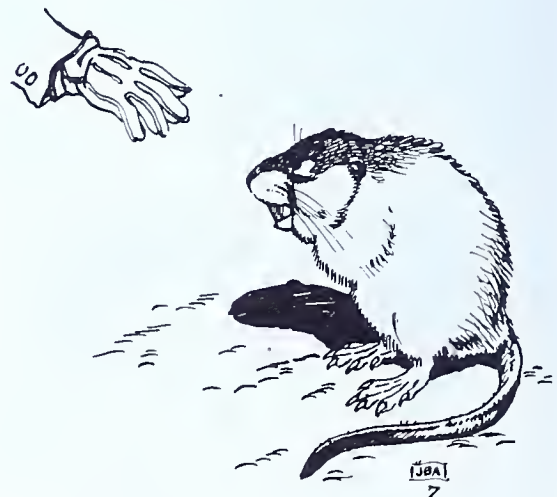
Alvie (Jocko) Ayres wasn't even hunting when he got his wild turkey. He was doing what he has been doing for the last 20 years—operating a mine at Bear Swamp, near Beech Creek, Clinton County. Ayres was tearing apart old mine cars left in the woods at Bear Swamp when a narrow-gauge railroad used to haul clay from the mines to a plant in Beech Creek was abandoned. Nuts on the old cars had rusted fast to the threads and screeched when Jocko turned them with a wrench.

The busy man heard what he thought was an echo. Then he noticed the echo appeared to be coming closer, but he still thought it was merely an echo for the sound was identical with the one produced when he reset his wrench and turned it.

Finally Jocko looked up and to his amazement saw a turkey approaching. Having no gun with him, he sneaked quietly away, went to his home some distance removed, got his gun and hunting license, and returned to the old mine car.

Placing his gun close at hand, Ayres resumed removal of the rusty nuts from their rusty threads. Again the screeching brought an answering call from the lonely turkey. Ayres continued twisting with his wrench, meanwhile watching the approach of the big bird out of the corner of his eye. When the turkey approached close enough for a good shot, Ayres laid aside his wrench, picked up his gun, and downed the bird.—W. Boyd Tobias, Williamsport.

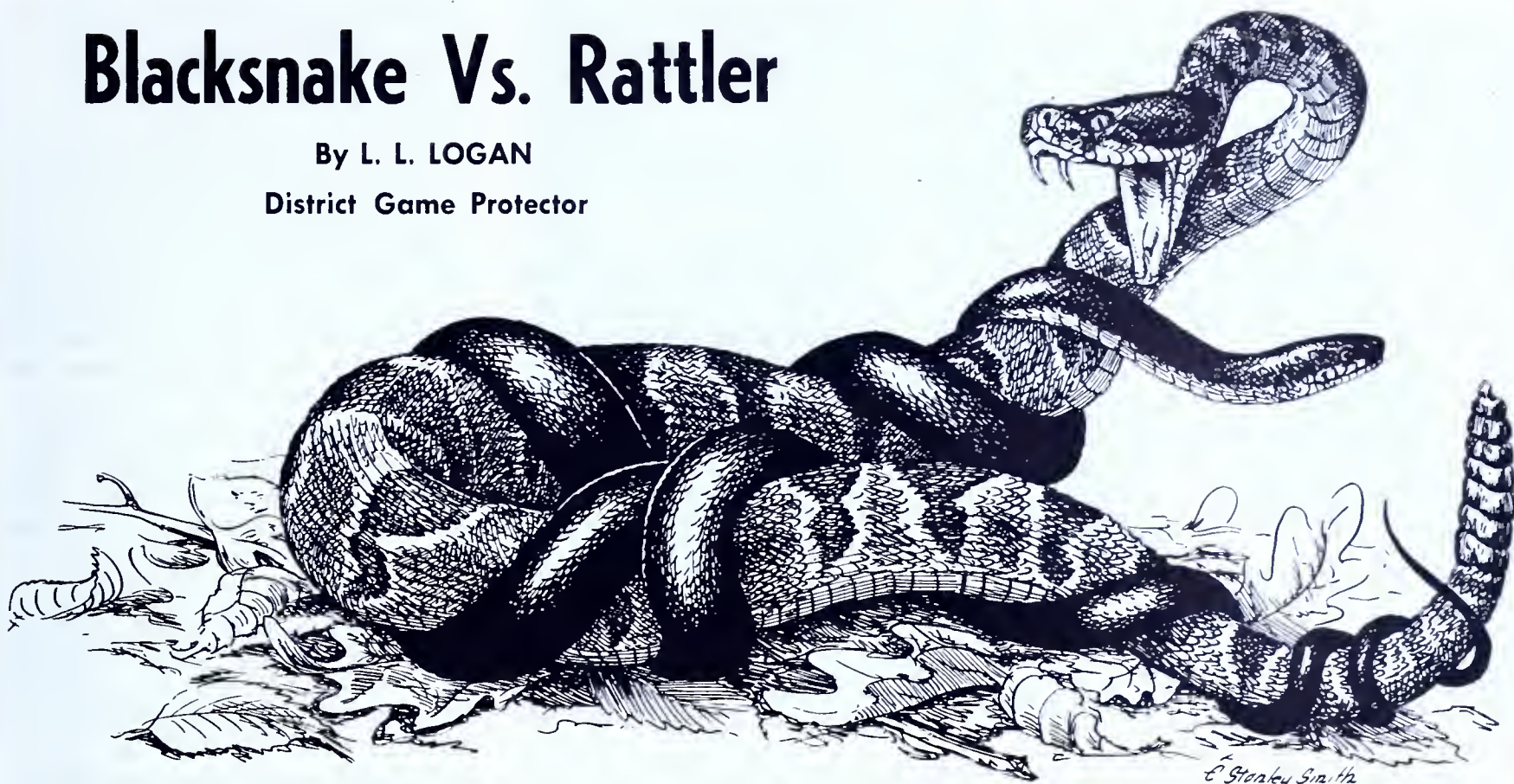
On March 29th about 5 p.m. I stopped my car to watch a muskrat that was feeding in a wheat field. After watching him for a few minutes, I noticed that both his front feet were missing, no doubt a result of some past indiscretion. I then got out of the car and attempted to catch him to see just what shape he was in. However, Mr. Muskrat had different ideas and reared back in defiance to my attempt to grab him by the tail. He then hopped down to a little spring run that emptied into Buffalo Creek. From all appearances, he was able to move just as well on two hind feet as he was when he had all four feet. In a few minutes he disappeared into a drain tile.—Game Protector Albert Kriefski, Lewisburg.



Blacksnake Vs. Rattler

By L. L. LOGAN

District Game Protector



THERE has been quite some discussion, and certainly no little dissension regarding whether or not a Pilot Black snake and a Pennsylvania rattler will enter into combat, and if they should happen to disagree just what one would emerge the victor. This incident occurred in Clearfield County some years ago.

Four of we young fellows who spent most of our time exploring the hills around home were out this particular Sunday afternoon when our attention was attracted by quite a commotion a few feet off the old road along which we were strolling. We stopped while one of the fellows went to investigate. His excited shout of "Boy, here's something worth seeing" caused us all to rush over to the scene.

I was just as surprised as the others to find a four foot Pilot Black snake and a rattler of approximately thirty inches in length engaged in a glorious battle. The rattler was nearly covered by the coils of the Pilot. It had evidently been some struggle up to this point, as we all agreed that it would require quite a lapse of time for the Pilot to secure so many coils around the rattler. These coils were very flat which evidenced the great power of the Pilot's muscles.

The area around the battlefield was pretty well beat up for a distance of about ten feet, and although we searched thoroughly we could find nothing to represent the cause of the battle, nor could we uncover the prize which should naturally go to the victor.

We could plainly see the fang marks where the rattler had scored earlier in the fray, but these did not appear to have any influence on the Pilot's strength or endurance.

It required about fifteen minutes after our arrival for the great coils of the Pilot to do their job, then he slowly relaxed and disengaged himself. After another period of five minutes, no doubt devoted to recuperation, he slid slowly away into the brush.

Our examination of the rattler disclosed that he was indeed quite limp and needless to say, very dead.

We estimated the complete struggle to have lasted at least a half hour, and the scene evidenced that it might possibly have greatly exceeded that length of time.



Wintergreen Fox
Wouldn't use a bear-box
To hold his provisions o'er head.
"Guards should teach bears
To take only what's theirs;
I'll keep my food under the bed."

In his tent, one dark night,
He expired of fright,
For a bear got in . . . big as a jeep!
And food, cot, Fox, bear,
Tent, boots, underwear,
Were all twisted up in a heap.
Carsten Ahrens

Snapping Turtles Important Duck Predators

The unsavory reputation of the snapping turtle as a predator has been found by scientific research to be entirely justified, the Wildlife Management Institute reports. These vile-tempered reptiles were found by the Maine Cooperative Wildlife Research Unit, headed by Dr. Howard Mendall, to take full-grown birds as well as ducklings.

Staff members of the Maine Unit last summer carried out an experimental trapping program during July on a few marshes which were known to contain both snapping turtles and broods of ducklings. A total of 35 turtles, ranging in weight from five to 41 pounds, was caught and their digestive tracts preserved for analysis during the winter in the Unit laboratory. Three of the specimens contained no food in the stomachs or intestines, but of the 32 remaining turtles 13, or 37 per cent contained remains of birds, primarily ducks and pied-billed grebes. The digestive tracts of most of the turtles contained remains of only one bird; but one 30-pound glutton had eaten two downy-young grebes, one full-grown grebe, one full-grown goldeneye duck, and one adult ring-necked duck. Remains of at least ten ducks, four of which were over half-grown young or adults, were identified in the study.

Research conducted to date has been of a preliminary nature, but, as a result of results obtained, a more detailed investigation is planned for the coming season by the Maine Cooperative Wildlife Research Unit, Dr. Mendall reports.



Mechanicsville Game and Fish Association

The Mechanicsville Game and Fish Association, formed on March 22, 1946, recently organized a Junior Sportsmen's Club for all boys 10 years of age or older. Included in the program outlined for the young sportsmen are forest fire prevention, conservation of natural resources, hunting and fishing methods, identification of game birds and animals, proper and safe handling of firearms, sportsmanship, game management, trapping methods, predator control, wildlife feeding, live trapping and transfer of rabbits, solid conservation, bird house building, fly tying, and tree planting.

York Izaak Walton League Chapter

The initial project for the Junior Chapter of the York Izaak Walton League, as announced by committee chairman Ez Myers, will be the construction of a memorial sanctuary on the club grounds. The "Ikes" have for several years been planting memorial trees to honor and commemorate deceased members but the project to be accomplished by the juniors is designed to provide an easily accessible spot which will feature a suitable flag pole and ornamental plantings.

Wysock Junior Conservation Club

Members of the Wysock Junior Conservation Club of Plymouth recently spent a lot of time and energy cleaning a vacant lot in readiness for a three day picnic the club will hold in mid-June. The club also has erected 50 bird houses in Plymouth and has cleared ground for a baseball diamond. Present officers of this active junior sportsmen's organization are: Thomas Shelly, president; Charles Kratz, vice-president; Michael Pastula, secretary; and Fred Kratz, treasurer.

Berwick Farmer-Sportsman Club

Governor James H. Duff was the recipient of a beautiful gold plaque as "The man who did the most in 1949 in the State for conservation" when he was honored at the annual banquet of the Farmer-Sportsman Club of Berwick on March 22.

Lewis C. Smith, Conservation Chairman, made the award in behalf of the club. The plaque, which read: "Annual Conservation Award, presented to The Honorable James H. Duff, Governor of the Commonwealth of Pennsylvania, who has faithfully defended from waste the natural resources of our state, its forests, waters and its wildlife," provided the main highlight of the affair.

Another impressive moment during the banquet was the presentation of checks by Governor Duff in behalf of the club to three Berwick youths who won a poster contest conducted in Berwick High School on a theme appropriate to National Wildlife Restoration Week. Paul Reagan, Kenneth Canouse and William Yanko won the first, second and third prizes respectively.

Governor Duff gave a fine talk to the 400 sportsmen and sportswomen attending the banquet in the Eagles Home in which he urged that we work to preserve this country in as good condition for the next generation as it was when handed to us.

Robert Downs, club president, gave the address of welcome in which he praised members of the club for making the event outstanding in the history of the active outdoor organization. Other Club officers who came in for praise were: Dr. P. M. Szutowicz, secretary-treasurer, who played a major part in arranging for the banquet; and Anthony Green, vice-president. Among the honored guests were: R. Clayton Culp, burgess of Berwick; Dr. William Weir, president of the Columbia County Federation of Sportsmen; the Rev. D. L. Shelmandine, past-president of the club; and William Reiter, vice-president of the Pennsylvania Railroad.

East Scranton Sportsman's Club

Since 1943, when the East Scranton Sportsman's Club was first organized, truck loads of game food have been distributed in Pike County hunting territory by club members. This unique game feeding program is financed by waste paper collections, according to R. W. Myers, club secretary.

Lower Merion Rod & Gun Club

New members joining the Lower Merion Rod & Gun Club sign the following club pledge: "As a member of the Lower Merion Rod and Gun Club, I will promote good will toward this Club and pledge myself to observe all State and Federal fish and game laws, to consider myself an ally of State and Federal fish and game conservation departments, respect landowner's rights, take interest in younger members of the Club, further interests and activities of the Club, for in so doing, I can help to preserve for others the good fellowship and sportsmanship toward which this Club strives. I further agree that failure on my part to uphold the foregoing pledge shall constitute my voluntary resignation from the Club."



Shown above is the presentation of the Farmer-Sportsman Club, Berwick Annual Conservation Award, a beautiful gold plaque, to Governor James H. Duff. To the right of the Governor are: Lewis C. Smith, Conservation Chairman, who made the presentation, and Robert Downs, club president.

Illinois Federation Begins Own Statewide Cover Program

Illinois' Federation of Sportsmen's Club has started its own state-wide wildlife habitat restoration program, according to the Wildlife Management Institute.

Some 200 individual multiflora rose nurseries have been established by member clubs and individuals throughout the state to supplement the planting program carried on by the State Department of Conservation and the Soil Conservation Service. Rose seedlings raised by the clubs will be planted next spring on the property of farmers where members customarily hunt. The Federation's program calls for a goal of one thousand plants for each of its 60,000 members.

Illinois sportsmen are digging into this project enthusiastically, according to word received from Executive Secretary Royal B. McClelland. Individual projects range from back-porch flower boxes in Chicago, through modest backyard plots, to extensive plantations established by members who own farms and estates. A club in Moline expects to produce 200,000 seedlings for distribution this fall and next spring. Broadlands Sportsmen's Club has set a goal of 250,000 as its quota, and 100,000 plants will be distributed by the Lincoln Sportsmen's Club. All over the state, beds of multiflora rose are beginning to sprout in parks, garden edges, and in back lots. Some indication of the enthusiasm of the sportsmen for this project is seen in the fact that when Mr. McClelland, as a stunt, taped one rose seed to each newsletter calling attention to the project, he later found that practically all of the seeds had been planted by recipients. Many of the sportsmen are establishing hedges of multiflora rose around their homes to secure a handy supply of seeds for future production. Several schools have planted seeds as part of their class study and intend to continue the process to see how many plants can be produced. Technical advice is being furnished the Federation by the Illinois Natural History Survey which is working closely with many clubs in experimenting with the rose.

This type of project should return Illinois sportsmen big dividends. Their efforts should be repaid by better hunting conditions, more game, improved relationships with farmers and landowners, and in a sense of genuine achievement toward a constructive goal.

Maine Club Emphasizes Hunting Safety

A sportsmen's club with the primary objective of instilling members and nonmembers alike with the need for handling firearms safely has been operating in Franklin County, Maine, for three years, the Wildlife Management Institute learns.

This organization, the Deer Hunters' Club, composed entirely of members working or residing in the town of Strong appears unique among hunting clubs in the emphasis which shooting safety is given in its program. Except for rifle, skeet, and trap-shooting clubs, this vital phase more usually is handled as



Reading Times Photo

Harvey Adams, extreme right, treasurer for 15 years of the Izaak Walton League of Berks County, who recently received the league's award for "outstanding work" in conservation. The presentation was made by Harold C. Marbarger, second from left, a former recipient of the award. Looking on are Robert Parlamen, extreme left, league president, and David L. Witman, secretary.

National Archery Tournament Scheduled for Lancaster in August

The 66th Annual Championship Tournament of the National Archery Association will be held at Franklin and Marshall College, Lancaster, from August 7 through 11. The Lancaster Archery Club and the Pennsylvania State Archery Association, in cooperation with the State Department of Commerce, the City of Lancaster, and the College, are hosts for the occasion which marks the second time that the tournament has been held at Lancaster. The 54th Annual tournament was held at the same location in 1937.

According to Clayton B. Shank, President of the National Archery Association, the tournament is expected to draw over 400 contestants from all parts of the United States. The matches will be shot on the Franklin and Marshall College campus, with the most interesting matches for spectators scheduled from two to four P. M. on August 10.

a side issue. Safety on the skeet field or the rifle range and safety in the field present two different problems, however, and it is encouraging to see this emphasis given by a club devoted entirely to a field sport.

Does this sort of an organization pay off? The record shows that it does. Not one hunting accident was reported from Franklin County last season and not one of the 144 club members has been involved in a gun accident of any kind.

Boy Scout Conservation Award Offered

Conservation-conscious since their organization 40 years ago, the Boy Scouts of America now may compete individually for a special conservation award given through the courtesy of the New York Zoological Society in memory of the late Dr. William T. Hornaday, the Wildlife Management Institute reports.

In order to apply for the award, scouts must show outstanding achievements in two major activities: by bringing about, through their own initiative, a change in policy or practice on the part of three or more farmers, property owners, or sportsmen toward the wiser use of natural resources; and by helping start a "going" conservation program in one or more organizations in their community. To qualify, all participating scouts must work under the guidance of a recognized conservation agency or technician, and they must back up their claims of achievement with news articles, letters of recommendation, and endorsements. Individual projects in the first category include the encouragement of crop rotation, strip cropping, contour plowing, terracing, and other soil conservation practices; construction of farm ponds; discouragement of needless burning and grazing of woodlots; the elimination of sources of pollution; by the planting of wildlife areas; and the encouragement of farmers to seek advice from qualified technicians on the use and management of land. Under the second category a scout may qualify by arranging meetings, which include adults, to consider local conservation needs and methods to be addressed by the representative of a recognized conservation agency; by helping start a community forest for the education and recreation of residents of the community, and in similar ways.



Hal Harrison Photo

What the sight of a dainty nest of a yellow warbler can do to a tired nature hiker is amazing.

LEAVE THE WHEELS BEHIND—from Page 4

great as your chances of being hit by an auto back in the city.

Pennsylvania has two poisonous snakes which might be met with by the walker on occasion and both—the rattlesnake and the copperhead—are noted for their desire to get out of *your* road. Furthermore, they are not statewide, but found in certain localities. Find out first if they exist where you are going to walk and then observe two simple precautions. Never step over a log or rock without being certain that the opposite side is clear. And never reach up with the hands to grasp roots or other brush to aid in climbing a steep bank without making certain no snake is there.

As a rule, only the startled or surprised snake will strike, so don't surprise them! If they know you are coming, they will give you a wide berth. So will the harmless snakes.

As for these harmless snakes, you are almost certain to encounter some. The common watersnake is accused of eating game fish, and probably does, but it's a part of stream life visible to everyone who will look. The little and beautiful smooth green snake, which is greener than the greenest grass, often is found along streams in hilly country. An occasional black racer, or a pilot black snake will be observed. The pilot snake got its name from a legend that credited it with guiding copperheads and rattlesnakes to safety when hunted down by men. Naturally, it doesn't—but this shining black snake is one of the country's few true constrictors and rather deadly to most small wildlife since it grows to as much as eight feet in length and requires a fair amount of food. The harmless snakes, generally, however, can be termed "mousers" because small rodents form their main diet.

Unless very lucky, you will not see the smaller rodents of the woods and fields because they are either nocturnal in habits, or else remain safely under cover. Nor will you encounter many raccoons or opossums on day hikes unless you are abroad in the dusk of evening when they start their wanderings in search of food along the creek bottoms. However, their tracks—which resemble somewhat the human foot—can be found in the mud and sand along the streams.

Look closely at the water. In the quiet shallows at the very edge of the banks will be tiny minnows, some scarcely more than a black sliver. They live there where the larger fish cannot pursue and eat them. Learn to look *through* the water rather than *at the surface* in the deeper pools. Down on the bottom, you are apt to see flashes of silver and then make out the actual form of the fish where some sucker is feeding around the rocks. Their mouths are like vacuum cleaners, and like vacuum cleaners they suck in their food from the bottom. In very quiet streams you may see huge fish. These are carp, also bottom feeders. On the surface, the chubs, sunfish, fallfish and bass will make dimples or swirling splashes when they eat some luckless floating insect.

Sometimes the walker will be startled by a splash right at his feet when the path runs immediately beside the stream. It is caused by a frog, of course. The big ones, which occasionally get as large as a plate, are the bullfrogs with the deep bass voices. The smaller, but somewhat similar green frog, and the brightly marked grass frog are most commonly encountered. And if you would see their young, look for large puddles in the low ground near the stream. Here there will be tadpoles of both frogs and toads in every stage of development, from tiny ones to large ones that are growing legs and turning into adults.

Rarely, on very dark days, you may see an ugly animal that looks like a small dragon on a rock. This is the hellbender, or "water dog." Despite its formidable appearance, it is absolutely harmless. The turtles you see will vary with the type of water. The brightly colored small turtle that slips from logs and rocks into the water upon your approach is the eastern painted turtle. The one seen swimming occasionally near the surface most likely is a musk turtle—more commonly known as the "stink-pot" because of the musky odor about it which gave it its other name. The rougher-looking turtle with heavy legs and tail, and a vicious head, is the snapper. Don't monkey with this gentleman because he has mighty powerful jaws.

In the woods, away from the water, a slow-moving tortoise is the common box turtle. This is the same turtle as the one usually found in gardens and fields, the turtle on which so many persons scratch their initials and the date. Another ground turtle is known as the wood turtle, or red-legged turtle. It has a rougher, flatter carapace than the box turtle and, when turned upside down, shows reddish-orange legs and underparts.

Let's leave the stream now and move into the upland fields and woods. Here we will

Scare up a rabbit, and the bobbing white tail may trace a zigzag course away from you and straight toward a groundhog hole. Down the hole the rabbit will pop like the Alice in Wonderland rabbit. Such groundhog holes offer sanctuary to the cot-

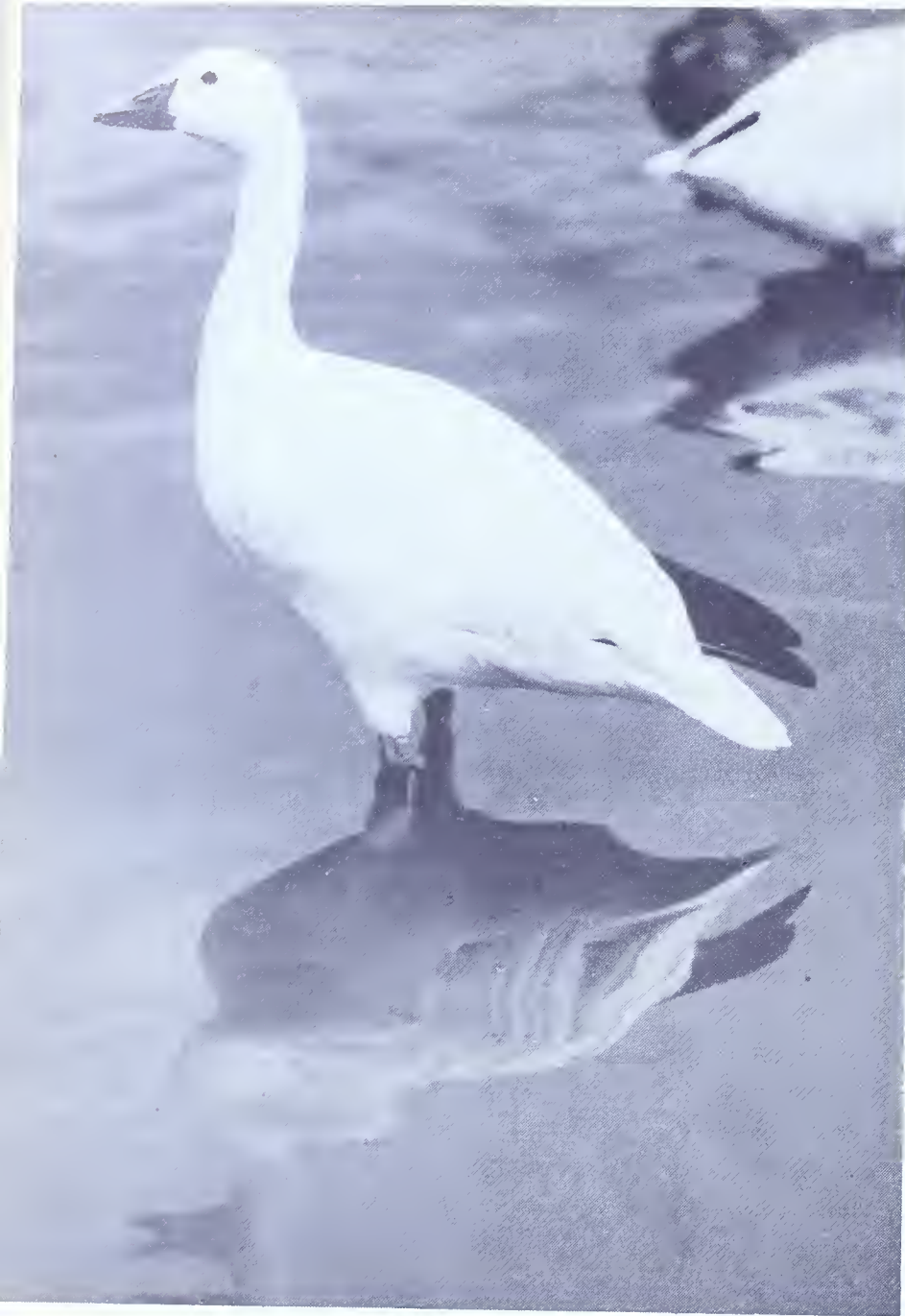


No matter where you go, you will see and hear crows. They are part of our landscape. Although condemned by many as black-hearted and destructive villains, there is no more interesting or intelligent bird in Pennsylvania. Watch them closely sometime.

And, now, don't you think it would be a good idea for *you* to go afiel*d* in Pennsylvania? Get off the wheels and try shank's mare for a change. It's fun.



Although the nature hiker will rarely encounter a poisonous snake, except in certain localities, it is well to know Pennsylvania's two venomous snakes. One of these, the copperhead, is shown above.



Karl Maslowski Photo

Although the wanderings of waterfowl, such as this Lesser Snow Goose, attract great interest among sportsmen, there are many mysteries of bird migration still unsolved.

OUTDOOR KIDS—from Page 13

Burdock, another common farm pest is a composite too and a close relative of the thistles. This one is easily distinguished by its great green leaves, a foot long, shaped like a rhubarb leaf, or a palm leaf fan. The flowers grow in clusters at the ends of the branches. These become burrs in the fall, the ones that attach themselves so easily to the clothing of anyone passing by. By sticking many of these burrs together, children often fashion houses, castles, baskets and wreaths from them.

Like the thistles, the burdocks are not native Americans. Indeed, the thistle is the emblem of Scotland.

It is said that the thistle once saved Scotland from being captured by the Danes. The Danes tried to surprise the Scots by stealing into their camp by night. The Danes were walking barefooted. Suddenly, one of the soldiers stepped on a thistle. He let out such a howl that he awakened the Scotch soldiers in time for them to stop the enemy.

When Jane heard this story, it pleased her.

"Well, all I can say is that if a Danish soldier can yell when he steps on a thistle, I guess I need not be ashamed for yelling 'Ouch' when I grabbed hold of one," she declared.

Billy just grinned.

SOME MYSTERIES AND MARVELS OF BIRD

MIGRATION—from Page 3

and yellow warblers were flitting among the alders at least a week or ten days earlier than usual. What surprised me most of all was the American egret which I saw at the Hartstown Marsh on the fifteenth of that month—a bird sporting a fine set of nuptial plumes. Never before or since has anybody reported seeing an egret at the Pymatuning in mid-April, let alone one wearing the breeding plumage.

Migration is not without its perils. The majority of our smaller land birds migrate entirely by night. The ducks, geese, and swans migrate both by day and by night. Night migration, of course, has certain advantages. During the hours of daylight the birds can rest and feed. Unless the season is getting late many birds apparently spend several days resting and feeding before they resume their journeys. A bird which launches on a night flight at twilight must remain aloft until dawn, unless there is bright moonlight; otherwise it would have to make a hazardous landing in totally unfamiliar territory. Such migrants generally are able to find areas in which they can take refuge during the light of early dawn. That is why we often see hordes of migrants in certain thickets on a spring morning which were definitely not there the day before. But, as Mr. Williams points out, once aloft these night migrants may become "pawns of the weather." There are numerous records which attest to the mass destruction of night migrants which encountered spring thunderstorms, or were overtaken by sleet or snow storms. Birds which start on their journey under the most favorable circumstances not infrequently run into these adverse weather conditions enroute, before they are able to land. Sometimes birds are borne far off their course by strong winds, or drop exhausted from battling the elements. Even waterfowl and grebes have been killed when they were forced earthward during a storm. Their lifeless and battered bodies have been found on highways into which they crashed, evidently mistaking the wet concrete surface for a body of water and a haven of refuge.

Again getting back to Mr. William's discussion, he points out that it is very unlikely that most spring migratory flights proceed in a direct north-south line, or in any straight line. He says "there are probably few spring seasons in which most birds that breed in the northern United States and Canada do not have to alter their course at some time, retreat in the face of bad weather, suffer dissemination indiscriminately over the continent, seek refuge in unfamiliar areas, and return to their regular course along abnormal routes." Those migrants which you will see some spring morning in your back yard may not have just arrived from the south after all. They may have actually arrived from the north or some other direction, according to Mr. Williams. And when some new arrival appears in the midst of a snow storm, don't think that it has necessarily been fighting its way obstinately into the bad weather. It may have actually been retreating from the storm when it was overtaken and forced to seek refuge in the shrubbery in your back yard!

WILDLIFE PHOTOGRAPHY—from Page 5

A large beach umbrella which has various drab shades of paint smeared on it will work well for a blind. Natural blinds utilizing brush, tall grass, or trees can generally be constructed quickly.

As it is generally known, deer have exceptionally poor eye sight and little blending is necessary to make the photographer look like the background. I have been waiting for deer on a runway, have had one suddenly appear, and even though I was as yet unprepared, the deer never saw me because I remained perfectly motionless.

Artificial bait is used to good advantage in photographing wild game. Wild bears, foxes, skunks and opossums, as well as other animals, can be successfully lured to sets which have been previously made. I also know of one photographer who can successfully call a fox by imitating the noise of a wounded rabbit. Squirrels too can often be called from their hiding place and quick shots taken of them as they appear upon the scene. Many songbirds can be squeaked close to your camera lens by kissing the back of your hand in imitation of the plaintive, mewing cry of very young fledglings. There are many tricks which can be used when taking pictures of wildlife. Perhaps this too adds to the reasons why wildlife photography is exciting and fun, as much as actually shooting the game with a gun.

Babies of such animals as chipmunks, woodchucks, raccoons, rabbits, etc., can be progressively tamed and all sorts of interesting and humorous pictures can be taken of them. Once an animal has grown from babyhood to regard man without fear, the problem of picture taking becomes exceedingly simple. It becomes merely one of coaxing the subject to a desired position against a suitable background and then utilizing the same technique as might be required for photographing a pet dog. Don't feel that this is *faking* pictures, for actually it is not and is time well spent, not to mention the many humorous poses which will otherwise never be had.

The main lack in photographing tame specimens lies in the personal feelings of the man behind the camera. Some enthusiasts may claim that there is little fun in taking pictures if it takes little trouble or effort to do so.

Still another method of photographing wildlife is the use of a remote control outfit. The camera can be placed on a tripod or supported on some sturdy object, focused on the intended subject and then some long wires attached to the camera and to some batteries set some distance away from the scene. Then, when the animal appears or the bird comes to its nest, the photographer sets off the camera and flash from a concealed position some distance away. Of course the camera should be partially concealed so that the returning bird or animal will not be startled by its appearance. However, with only a few twigs or grass placed over the camera, its outline will be broken and the subject will quickly become accustomed to it.

This method is ideal when photographing woodchucks when they emerge from their burrows. Many bird photographers use this same set-up. The camera is focused on the subject and set off by the batteries some distance away. Often this is the means of capturing some rare and wonderful pictures.

Still another method of taking wildlife pictures at night is with a flash and the use of some sort of trap. Night photography of wildlife is almost a separate science or hobby. In essence, it requires the skill of a photographer and trapper, woodsman and hunter, knowledge of baits and scents, and infinite attention to details.

The traps used when photographing game at night make no attempt to hold the animal, but instead release a flash simultaneously with the operation of the camera shutter. For this purpose special equipment is necessary as well as a reasonable amount of mechanical ingenuity in setting the trap.

The camera must be fixed firmly upon a support at a fixed distance from a previously located trail or bait, and a string or wire arranged so that it will be tripped by the animal, when, as, and if it appears upon the location. The photographer then retires to return later to see if his trap has been sprung. If it has, he undoubtedly will feel a sudden tingling of joy for there is a surprise picture waiting for him.

The problem of releasing thread or wire is the most difficult one in this method of photographing wildlife. The pull given by the animal must be strong enough to set the flash mechanism off, but not so strong as to jerk over the camera. One very practical trick is

to use a common mouse trap between the thread which the animal will touch and the wire which will trip the shutter.

Only a slight twitch of the thread will trip the mouse trap and that spring will transmit to the wire enough energy to operate the camera release lever some distance away. However, both thread and wire must be so arranged that no twigs or debris will interfere with it. Part of the fun of set-camera work with wild animals is the element of surprise. Theoretically the thread stretched across the trail or path commonly used by deer would cause the picture to be of a deer or some other large wild animal. Such is not always the case, for a bird may flutter against the string and set the trap off. All sorts of queer accidents are bound to happen and will!!

Once released, neither trap nor camera will operate again until the photographer resets them. More cameras must be set up if more than one picture is desired in one evening. This runs into quite an expensive hobby, if many cameras are used; however, often odd discarded cameras which will do the trick can be obtained for small sums.

Photographing animals is indeed interesting, exciting and fun. More often shooting game with a camera requires much more skill and patience as well as knowledge of the game than does hunting with a gun. And as for excitement, let the seasoned hunter try stalking and photographing wild game rather closely, and he will find it as exciting as bagging his first bunny when he was but a youngster.

Carrying a camera afield can be the means of capturing many other delightful scenic pictures. Huge mountains, rugged terrain, valleys with their clear sparkling rivers, twisted and weather beaten trees, wild flowers, and many other subjects will add unusual interest to the sportsman's album of pictures.

This shot of a cottontail rabbit was made with the aid of a telephoto lens.





Buffalo Bill's famous old Winchester is coming home. A symbol of the early West, the historic Model 73 lever action repeating rifle, used by William Frederick Cody, will be presented by its owner, Colonel Walter F. Siegmund (above) to the Buffalo Bill Museum in New York on July 4th.

AMERICA'S NUMBER ONE GUN—from Page 14

trouble with the bullets pulling out and remaining in the bore in extracting loaded shells that since the turn of the century the cartridges have been crimped. In great part this has been responsible for the high accuracy of our best cartridges today. It developed that breed of small bore shooters whose knowledge of what makes accuracy and how to deliver it on the target has never been equalled in the annals of marksmanship. In its standard loading the long rifle cartridge will drive a 40 grain bullet at a velocity of 1145 foot seconds or just above the speed of sound. Thus, even if a silencer was legal, the gun would not be noiseless since the crack of the bullet would be as loud as the report of the gun. The Hi-Speed loading drives a 37 grain hollow point bullet at a velocity of 1365 foot seconds with an energy of 149 foot pounds.

One question that comes up more than any other is, "Does it damage a rifle to shoot shorts in a long rifle chamber?" The answer is more or less a Scotch verdict. As far as erosion goes, it would pit the chamber in time—enough let's say to warrant buying a new barrel. The accuracy is never very good with shorts in a long rifle chamber. To start with, the bullet has an excessive jump from the shell before it strikes the rifling. This is not done in the best circles. Then there is the fact that the 22 short delivers its best accuracy with a pitch of one turn in 24 inches. All rifles chambered for the 22 short are bored in this manner. The 22 long rifle delivers its best accuracy with one turn in 16 inches. So consequently, all rifles that are interchangeable are bored with one turn in 16 inches.

In regard to accuracy the 22 caliber is probably the world's most temperamental prima donna. Having done quite a bit of experimenting with various makes and models, I can state that the very best 22 caliber can be capable of very fine or very mediocre accuracy, depending on the make or lot of cartridges you shoot in it. No other gun is so susceptible to ammunition as this caliber. I've had a rifle costing one-third as much as my Winchester "bullgun" shoot right along with it with some makes of shells. Yet with the right shells that same "bullgun" would shoot inch groups at 100 yards while the other could not get under 3 inches with any ammo at this distance. Different makes vary in their components and even different lots of the same make vary due to wear of loading machines and other factors. You can be sure that more difference in accuracy exists in different makes and lots of ammunition than between the various rifles chambered for them. This does not mean that a cheap rifle will shoot with an expensive

match rifle with the right fodder, but it will if the ammo is not right. This may come as a shock to the tin can man but the top flight small bore shooters have known it for over a quarter of a century.

Other important factors governing fine accuracy are head space and the bedding of the rifle in the stock. Head space should be adjusted to a minimum and maintained that way in a rifle used for match shooting. Any change in head space is a change in ignition which is fatal to accuracy. Head space is much more easily maintained in bolt action rifles than other types of actions and this is the reason that winners and record holders are of heavy bolt action design. A good heat-treated bolt action, once adjusted, should be good for 5000 rounds before needing attention. The top small bore rifles with correct match ammunition will shoot inch to 1½ inch groups at 100 yards. The ordinary run of pump, lever action, and similar rifles will do about the same at 50 yards.

Now from the field standpoint of trajectory, the range will not exceed 100 yards at the most. Here are some sight settings that will prove most useful in the field for the hunter and general plinker. With the regular velocity cartridge, sight the rifle in at 60 yards and you will average striking 1 inch high at 35 yards, about an inch low at 70 yards, about two inches low at 80 and 6 inches low at 100. With high velocity ammunition set to strike center at 75 yards, you will shoot one inch above aim at 40 yards, one inch low at 85 yards and nearly 4 inches low at 100 yards. These figures are sure hitting range on small game. For head shots the sure hitting range would run 50 to 60 yards. This takes in squirrels and similar animals.

The following table of wind deflection will be of most importance to target and small game shooters:

Muzzle Velocity	Wind Deflection	Wind Deflection
	50 yards	(5 miles 3 or 6 o'clock) 100 yards
1100 ft. sec.	.48 inches	2.04 inches
1350 ft. sec.	.83 inches	3.10 inches

While it would take a book to go into detail on the 22 caliber, I hope this will answer most of the questions usually asked. At least it will give the average man a better insight into the vagaries and quirks of the world's most popular gun.

BUYING A DOG—from Page 14

turn out to be in the superlative class.

When my home was in Carolina I wanted a thoroughly trained grouse dog and after selecting a man who owned several I made the long five hundred mile trip to see the dog work. We went into the grouse woods and I saw a beautiful performance. Needless to say I took the setter back with me. After a week we took to the woods and the dog was a whiz until I became tired of the thick brush and sought out a path. When the dog saw me walking the path she did likewise and nothing I could do would make her hunt the cover while I walked the easy road. When I would set foot into the cover then she would cast beautifully. I wrote her former owner and he was determined to do nothing about it. However, under the threat of exposing him in a sporting magazine he did replace her with a fair grouse dog.

Only one other time was I tricked by a dog salesman. I bought a setter that kept every neighbor awake all hours of the night with the most pitiful cries you ever heard, and the owner had sworn he was very quiet at night.

With these two exceptions I have found many good friends and wonderful sportsmen who earn their living by selling gun dogs. I know of cases where they have lost money to satisfy a client. There are many who are careful enough that they refuse to sell a dog unless they know the buyer and are satisfied the dog will have a good home.

When buying a dog please don't expect a thousand dollar dog for a hundred. If your tastes run high in hunting stock, it will have to be matched by your billfold. In gun dogs, as in every other field, you get only that for which you pay.

Be careful of whom you buy your dog. If you buy from the reliable you help him help yourself, and also aid in eliminating the unreliable ones.

Red Lion Sets Up Fly Control Program

Red Lion, York Co., population of about 5,500 is setting up a program of fly control, the first instance recorded in this State in which a community has entered into a plan devoted exclusively to that work, according to Dr. Norris W. Vaux, State Secretary of Health. It will be financed by funds derived from private sources and from an appropriation made by Borough Council.

The program was arranged by Dr. Russel W. Gies, Principal Sanitary Engineer Consultant on Insect Control of the Bureau of Engineering, State Department of Health and will be directed by Dr. Richard Darcie, entomologist of Franklin & Marshall College, Lancaster, assisted by a medical student.

The work will be carried on throughout the borough and in the farming area in the surrounding territory. It will entail eliminating fly-breeding sources and spraying. Farmers will be asked to cooperate by defraying from having manure piles and if that is not possible, to apply sprays.

Decision on the part of the residents and borough officials to enter into the program was prompted by the death last year of two children of the borough from polio. According to scientific research flies transmit the polio virus. This has been shown to be true in laboratory tests particularly from sewage. It is claimed by the U. S. Public Health Service flies will carry the virus from sewage both through their bodies and on their feet.

WOODCHUCK STRATEGICS— from Page 11

don't leave the den without first trying to get him out. Oftentimes he can be retrieved by taking a forked stick long enough to reach past the first bend at the bottom of the den. Then when you feel the stick touching the woodchuck twist it around until the forked end catches in the animal's hair. Then pull gently until the hog is worked out far enough to grasp it with the hands.

Nor is that all that can be said for the woodchuck, even after you bag one, for then comes the eating, and believe me he makes fine eating if you prepare him right. I've eaten him served every which way, but the following beats all the others.

Try this on the next woodchuck you bag. Clean woodchuck completely free of all fat, lymph kernal and glands. Soak over night in vinegar and salt water, with a handful of pickling spices added. Then freeze at least 24 hours, preferably 48. Next roll woodchuck in flour and brown in hot, deep grease. Then cube a large pan full of all vegetables, except potatoes. Cover bottom of a roast pan with vegetables, then put in a layer flapping ears, above a rangy frame. Place in browned woodchuck, season each layer as you go, add layer for layer, putting vegetables in heavy. Use plenty of garlic, cut up fine and mixed with vegetables. Also add a small amount of crushed hot pepper seeds to the vegetables. Sweet or white potatoes (either or both) may be added to the roast pan approximately one hour before the meat is done.



Sora rail.

SHORE BIRDS ON TINICUM MARSHES—from Page 7

Both golden and black-bellied plover pitched in, whistling, and stood immobile or strutted over the flats with their big heads held erect on their thickset necks. These are among the princes of the shore bird realm, strong-winged athletes who (the golden) fly fifteen or sixteen thousand miles annually between arctic Alaska and the lower Argentine. They were in fall plumage, the black breasts looking considerably lighter in color than the smaller golden. In flight the former show jet-black axillars on the under side of their wings and whitish upper tail coverts. Golden appear generally darker and their tails are dark brown with no white patches.

A small group of killdeer kept to themselves on one of the little delta peninsulars, often whirling up with shrill alarm notes, circling the flats in compact formation and again dropping in with much flurry of extended wings. One solitary sandpiper picked his way daintily along a muddy rim, bobbing and tilting, showing his black and white barred tail as he flew.

After the mist had lifted a foraging marsh hawk appeared, coursing over the sea of cattails in the near distance. A sparrowhawk perched nearby on a low stump, as motionless as if carved in the wood. Severely he looked over his black moustaches, scowling from beneath beetled brows, for all the world like a judge pronouncing sentence.

Along a reedy canal, bordering part of the flats, an American egret and a great blue heron stood knee-deep in an opaque film of green scum. Not far away a Florida gallinule poked through the rushes like an inquisitive chicken. A stone tossed into the cattails brought forth the protesting "Keek" of a startled sora rail.

Far out over the Delaware a waving string of thirty or more big Canadian honkers went over, heading south. They were followed by skein after skein of ducks, beating down toward the Chesapeake, etched in wavering lines against the billowed masses of high cumulous clouds.



THE SHARP-SHINNED HAWK
By ROBERT D. McDOWELL

From 1924 to 1947 several employees of the Pennsylvania Game Commission conducted intermittent food habit analyses of winged predators. Among these persons were Sutton, Luttringer, Langenbach, Latham, and the writer. The following report represents their combined findings regarding the Sharp-shinned Hawk.

Although it is not known just how many individuals of this species were examined during the period, the counties in which 301 specimens were taken are shown in Figure 1.

Figure 2 itemizes the prey eaten by 306 birds that contained food when examined.

The most significant feature of these various analyses is that they were conducted at various times of the year, thus eliminating the portrayal of a biased picture formed from the presentation of a seasonal diet alone.

After examining Figure 2 there is no reason to question the wisdom of the Pennsylvania Game Commission in maintaining that the Sharp-shinned Hawk deserves to be declared an unprotected bird in Pennsylvania.

Figure 2

DIET CHART OF 306 SHARP-SHINNED HAWKS		
Food	Occurrence	Percentage
Passerine Birds	303	95.89
Unidentified Birds ..	7	2.21
Mice	2	0.63
Bat	1	0.31
Cottontail Rabbit	1	0.31
Chipmunk	1	0.31
Chicken	1	0.31
Total	316	99.97

Figure 1

DISTRIBUTION RECORD OF 301 SHARP-SHINNED HAWKS	
Berks	43
Blair	2
Bradford	1
Centre	18
Clarion	2
Clearfield	1
Clinton	2
Columbia	2
Crawford	1
Cumberland	2
Fayette	2
Franklin	2
Fulton	199
Huntingdon	2
Lancaster	1
Lebanon	3
McKean	1
Mercer	1
Montgomery	1
Northampton	2
Snyder	3
Sullivan	2
Susquehanna	1
Venango	2
Warren	2
Washington	1
Wayne	2
301	



Sharp-shinned hawks are small replicas of the Cooper's Hawk and are usually found hunting through heavily wooded hemlock, beech, and birch forested areas. This hawk is a migrant and summer resident in Pennsylvania from March 1 through November and may occasionally be seen in winter.

Rabbit Box Trapping Program
Great Success

Nearly complete records indicate that Pennsylvania's box trapping program, carried on between December 1, 1949, and April 1, 1950, resulted in a near-record catch. Approximately 40,000 "home-grown" bunnies were taken in towns, parks, tree nurseries, and other places where they were not desired. This though an "open" winter was experienced in the cottontail rabbit counties of the south and west. (When the ground is bare some feed is available and it is then more difficult to attract cottontails to bait in the live traps.) These rabbits were released for the most part on land open to public hunting. A small percentage was liberated on new rabbit farms to insure sufficient brood stock which will eventually result in a greater hunter harvest.

It is almost impossible to lure a bunny into a trap when natural food is available, as it is in spring and summer. Also, most people would rather suffer a little damage than to take a mother rabbit from her dependent young. Therefore it is recommended that those bothered by cottontails notify their District Game Protector. Their properties will be trapped next winter with the result that rabbit damage the following spring will be eliminated, or largely reduced.

Gardeners have found several rabbit repellents to be effective. Among them are dried blood, fine tobacco dust and Rotenone. And when moth crystals are sprinkled around the borders of small garden plots rabbits usually stay outside of them.

Milwaukee Host to 16th North
American Wildlife Conference

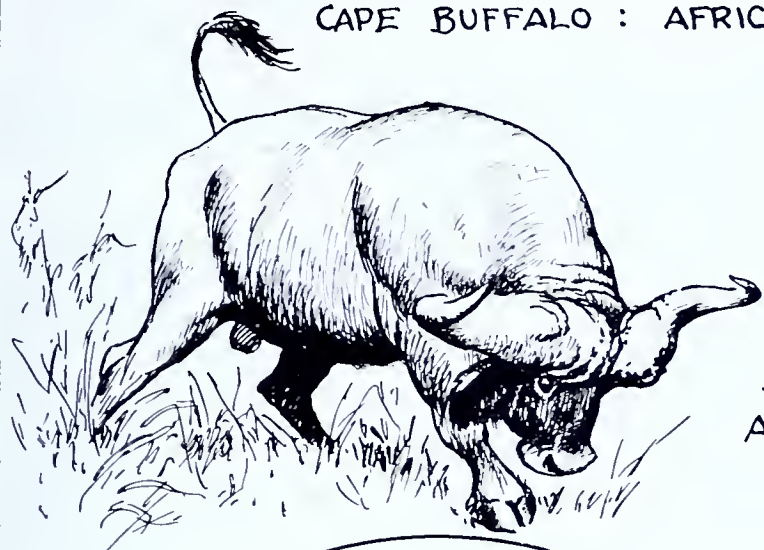
Milwaukee will be the site of the 16th North American Wildlife Conference on March 5, 6, and 7, 1951, the Wildlife Management Institute has announced.

Headquarters for the international meeting, which will be devoted to a discussion of problems and progress in the restoration and preservation of renewable natural resources will be the Hotel Schroeder. In announcing its selection, the Wildlife Management Institute, sponsor of the annual Conference, stated that the choice was a tribute to the outstanding progress that Wisconsin and neighboring states had made in the field of conservation within recent years. This will be the first time within three years that the Conference has been held in the Midwest and the first time since 1944 that it has been held in one of the Lake States. The Ninth North American Wildlife Conference convened in Chicago in that year.

All phases of natural resource conservation are discussed by the outstanding authorities, and an attempt is made by the program committee to select a panel of experts who can present all sides of major problems. Usually more than 60 papers are presented during the three-day meeting. There are three general sessions at which the broader phases of conservation are discussed and six technical sessions dealing with new techniques and improved methods of wildlife and fishery management.

THE WORLD'S MOST DANGEROUS ANIMALS

CAPE BUFFALO : AFRICA

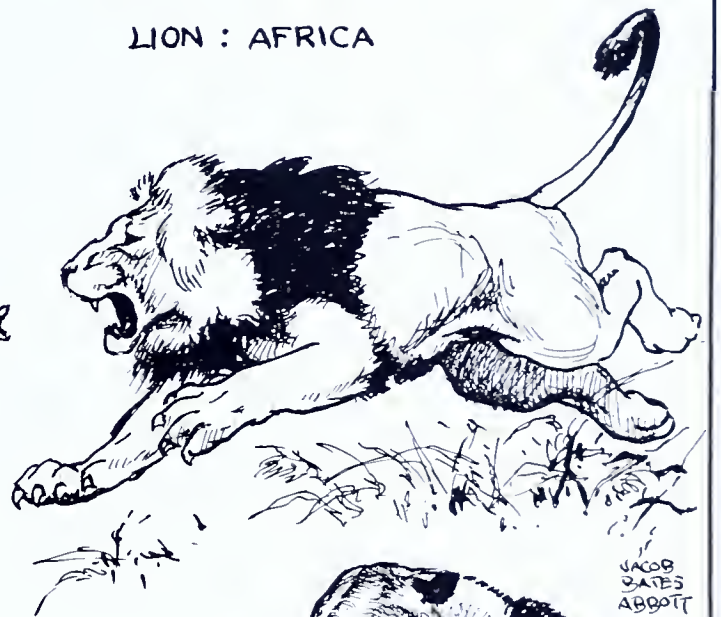


SALADANG : MALAY PENINSULAR,
INDIA • THE LARGEST AND FIERCEST

WILD OX
IN THE
WORLD •
EXCEEDED
IN SIZE ONLY
BY THE ELEPHANT
AND RHINOCEROS •



LION : AFRICA

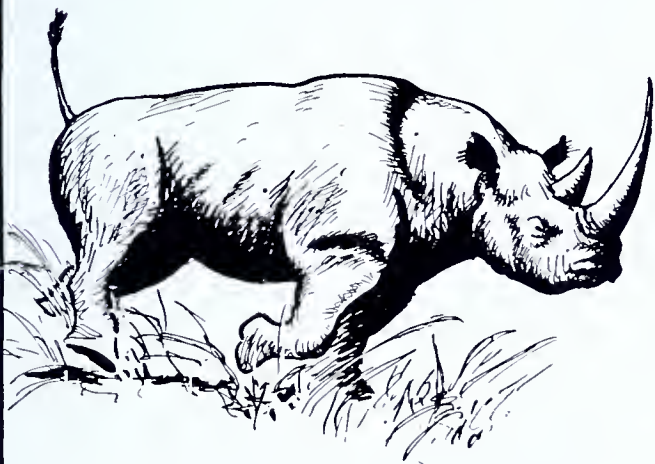
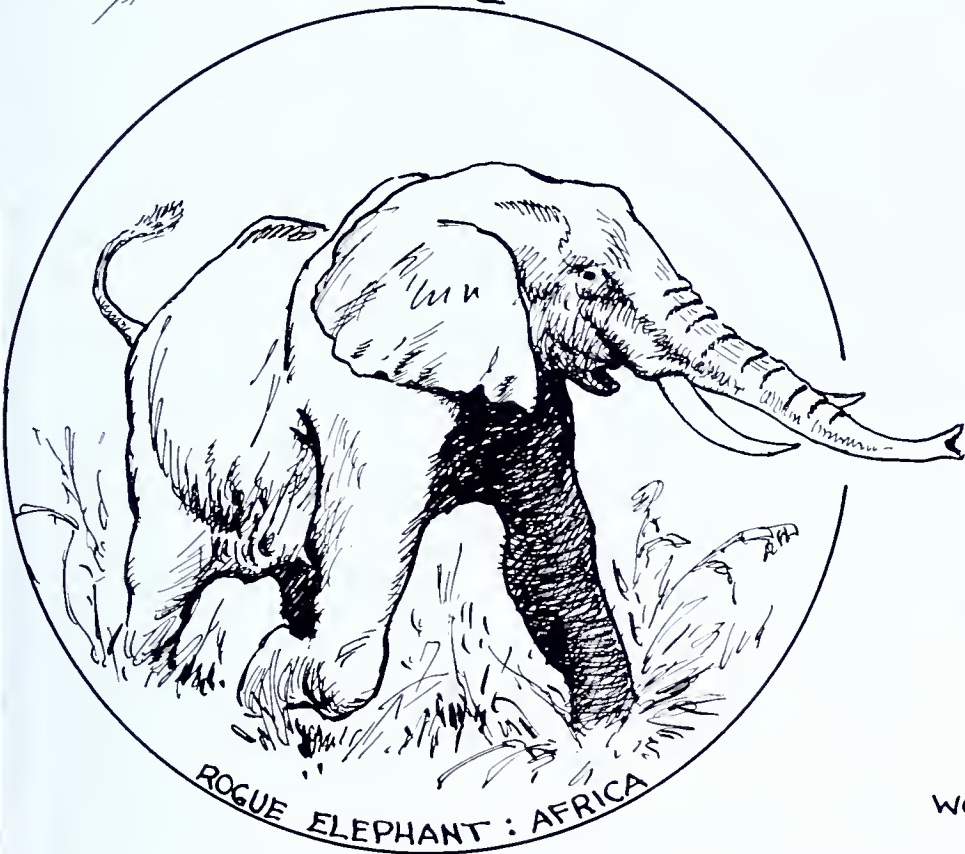


JACOB
GATES
ABBOTT

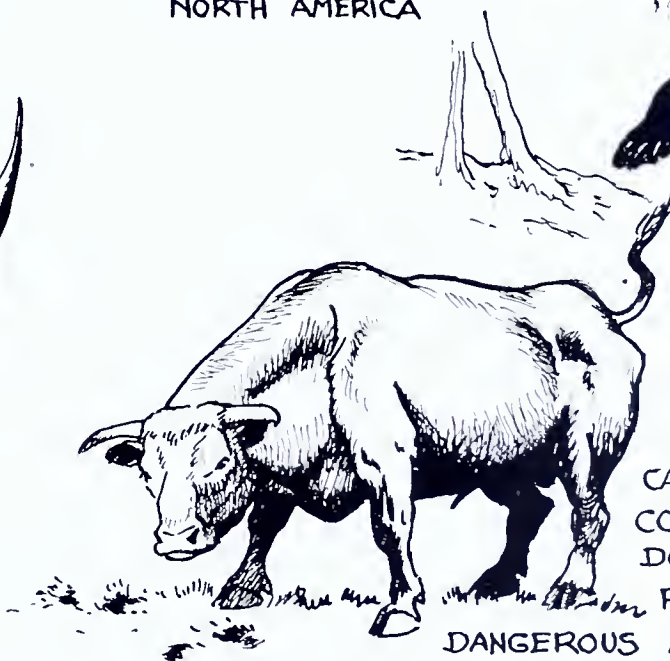
WOUNDED
GRIZZLY :
NORTH AMERICA



ROGUE ELEPHANT : AFRICA



BLACK RHINO :
AFRICA



CARL AKELEY
CONSIDERED THE
DOMESTIC BULL
PROBABLY THE MOST
DANGEROUS ANIMAL IN NORTH
AMERICA •

THE STORY BEHIND THE COVER



One crisp November morning last fall a northeastern Pennsylvania hillside rang with the shout, "There goes a rabbit!" It was immediately followed by a startled cry, "Don't shoot. That's no bunny—it has a silver ear and yellow tail!" With that, the party of hunters returned home, no doubt sure that they had just seen Pennsylvania's rarest animal.

But if early results of the Pennsylvania Game Commission's three rabbit management studies—in which these unusually marked cottontails are used—are any indication, that party of sportsmen and all their kin are in for more rabbits and better hunting in the future.

Started three years ago, these practical research studies are being conducted by the Commission with the aid of Pittman-Robertson funds. Projects in the northeastern, northwestern, and southwestern parts of the State are designed to obtain practical wildlife management information on what makes rabbits grow and, especially, how to make them grow more numerous. The emphasis is on food and cover development. Above all, these studies are aimed at showing interested sportsmen and wildlife managers how abandoned farmland may be restored to produce a valuable annual crop of cottontails. The eyes of wildlife administrators in all northeastern states are focused on these projects and already several of Pennsylvania's neighbors have sent observers to the project areas.

Project leaders like Wilmer Richter, shown on this month's cover with one of his study "subjects," are working long and hard to find the way to more rabbits. Using various management methods, such as cutting brush and piling it in rows or simply lopping young, valueless trees over to form nesting and escape cover, these Commission workers are getting answers to vital questions. For example, it now appears, surprisingly enough, as though a major limiting factor to rabbit abundance on these lands is a lack of summer food. Yet, on one study area, research workers were able to increase the rabbit population so much in one year through food and cover improvements that hunters found a harvestable surplus of 51 animals last fall where they had found absolutely none the year before.

The "silver ears and yellow tails" which so alarmed that party of hunters last fall do no harm to the rabbits but are invaluable to the researchers. Project leaders must keep accurate records of the exact number of rabbits on their areas. They census the cottontails by an intricate system of live-trapping and tag their subjects with a silvery-white ear marker in order to tell them apart. The harmless yellow dye used on the rabbit tails is simply a means by which the men can easily spot the released rabbits in the field.

WILDLIFE RESEARCH IS A KEY TO MORE WILDLIFE IN YOUR KEYSTONE STATE!

PENNSYLVANIA Game News



AUGUST 1950

TEN CENTS



The GAME NEWS

WILLARD T. JOHNS, JR.
Editor



PUBLISHED MONTHLY BY THE PENNSYLVANIA GAME COMMISSION, HARRISBURG, PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA

JAMES H. DUFF, GOVERNOR

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Control the Bandit— But Protect Your Friend

Despite conclusive proof to the contrary, vigorous educational campaigns by various conservation organizations, and sound protective laws, the old and outworn adage that "the only good hawks are dead ones" has apparently remained unchanged in the minds of too many hunters and farmers. Each year thousands of hawks, proven to be beneficial to both groups, are killed in the mistaken belief that all hawks are destructive and harmful.

Enough studies of the food habits of predatory birds have been made to prove conclusively that most hawks are good hawks—that these birds feed mainly on rodent or insect pests that are highly injurious to farm and wildlife crops. But for years these studies have been published with little apparent effect on the tendency of many persons to fix the blame for wildlife shortages on some particular wild bird or animal.

The call of the wild occasionally prompts even a good hawk to feed on a game bird or animal, songbirds or poultry, as a hungry person might pilfer food to sustain life. The common, attractive and beneficial little sparrow hawk, for instance, is occasionally found in the act of killing songbirds. Yet it feeds almost entirely on insects, many of which are highly destructive to farm crops. When insects become scarce, the little fellow's fight for survival may depend on its ability to take what is at hand.

Because most hawks are not commonly observed, those few that are seen pursuing or killing song or game birds and animals arouse condemnation of the entire hawk family. While all bandits are human beings, yet who would be so unfair as to say that all humans are bandits.

Wise conservation demands that some control be exercised over the few hawks and owls that are proven to be destructive to game and farm crops. Extinction of these birds is neither intended nor desired, because they are part of Nature's plan. But when certain species, such as the goshawk, Cooper's hawk, and sharpshinned hawk, are found to be destructive to poultry and wildlife, control of their numbers is required. Any hawk that raids a poultry yard, even though such a food preference is developed rather than instinctive, should be controlled.

Not only is indiscriminate shooting of all hawks, whether it be along the flyways or on the farm, uncalled for, it is contrary to good conservation and a violation of the law. Most hawks are beneficial because they increase farmers' profits and protect sportsmen's interests. They are a necessary part of every properly balanced wildlife population and deserve the protection provided by law.

DON'T SHOOT PROTECTED HAWKS—THEY ARE BENEFICIAL



WHAT IS A CHICKEN HAWK BY CHARLES P. FOX

Reprinted by special permission from the FARM QUARTERLY—Winter Issue—1948

The night hawk is not a hawk, the sparrow hawk doesn't live on sparrows, and most chicken hawks don't catch chickens.

ONE winter day I was watching a hen pheasant eating at a feed hopper behind my house in Wisconsin. Like a bolt out of the blue a Cooper's Hawk hit her in the back. The pheasant was killed instantly. I ran out and robbed the hawk of its meal. When I dressed the pheasant I found her back crushed as though someone had struck her with an iron bar.

Hawks live by killing. They know only to take their food where they find it. Since the food that all hawks like is either on the foot or on the wing, and very much alive, it means that hawks by nature must be killers. The food of many hawks is insects and rodents that are in turn enemies of the farmer. To most farmers all hawks are chicken hawks and best observed through the sights of 12 gauge shotgun. The foraging of beneficial hawks is less spectacular and seldom seen, but those which raid the poultry yard give all, both good and bad, an evil reputation.

Few of us can tell one hawk from another, so we shoot everything that remotely resembles a hawk, and feel very righteous about it. This constant hunt may even include such birds as the night hawk, which is really not a hawk, but a cousin of the Whip-poor-will.

If a pair of Cooper's hawks live in the woods a half mile from the chicken yard and make daily raids on the poultry the farmer is filled with righteous anger. The Cooper's hawk likes young, tender fowl. On a killing spree, it can cause a farmer many anxious days. Eventually the farmer is waiting just inside the barn door with his shotgun at the ready. The hawk swoops around the edge of the woods and comes in for a landing on the back of a spring fryer. At the same moment the farmer steps outside the barn and stops the killer with a pattern of buckshot. The hawk is nailed to the side of the barn and the kids get the idea that only dead hawks are good hawks.

If a big, Red-shouldered hawk flies in over the barnyard he too is shot. The farmer is satisfied that he has stopped a much worse hawk than the one that raided his hen yard because it's larger. Actually the Red-shouldered hawk was probably looking for meadow mice and wandered off his beat. He would have paid no attention to chickens, for his diet is 95 per cent insects, mice, gophers and frogs. The problem is to tell one hawk from another, the good from the bad.

No two kinds of hawks have the same eating habits. In the Midwest there are nearly a

dozen species and each has his own ideas about what constitutes a good lunch.

Hawks that eat mostly mice earn their keep on any farm. One way a farmer can save himself some money every year is by learning to identify the mouse eaters and encourage them to stay on his farm. The U. S. Department of Agriculture says that it takes 23 pounds of green food to support one meadow mouse for a year. It is estimated that no farm land has less than 10 mice per acre, which means that on every 10 acres of meadow, mice eat a ton of hay a year.

Wildlife statistics show that in regions where hawks are growing scarce this figure of 10 mice per acre is increasing.

Some sportsman's clubs still stage vermin hunts in which they encourage members and neighborhood boys to collect all the pests they can find. Among the rats and crows turned in are usually a few hawks that if allowed to live would have continued the vermin hunt long after the closing date.

Your Free Boarders

Nurserymen and fruit growers should be the hawk's best friends. Their losses from the girdling of young trees by rabbits and mice in the winter would climb if it were not for the methodical patrols of the mouse hawks, or Buteos.

Those who make a business of studying the habits of birds have two methods of finding out what a hawk eats. Sometimes they build a bird blind in a tree near a hawk nest and study through binoculars the types of food the old birds carry to their young. The more accurate method, however, is to look into their stomachs.

Stomach analysis is an infallible method of telling which hawks are on the farmer's side and which are not. The Bureau of Biological Survey of the Department of Agriculture studied 5,185 stomachs of different species of hawks. After identifying what the birds had eaten, the experts listed the hawks in their relation to the farmer.

Enemies of the farmer:

Goshawk, Sharp-shinned hawk, Cooper's hawk.

Indifferent (Bad and good habits about equal):

Marsh hawk.

Slightly on the good side:

Red-tailed hawk.

Almost entirely beneficial:

Red-shouldered hawk, Broad-winged hawk.

American Roughleg, Sparrow hawk.

Such a list, however, is of little practical value to the average person, since most of us can't tell one hawk from another. If we are to protect the good hawks and kill the bad ones we must first be able to tell the difference between them. This is no easy task, for in their quick flight they look very much alike. People who have learned to identify hawks divide most of them into two types:

1. "Accipiters" or "bird hawks," which include the Goshawk, Cooper's hawk and Sharp-shinned hawk.
2. "Buteos" or "mouse hawks," including the Red-tailed, Broad-winged, Rough-legged and Red-shouldered hawk.

The largest of the Accipiter group is the Goshawk; next the Cooper's hawk, and the

smallest is the Sharp-shinned hawk. These are long, slender in body, and have long, narrow tails and short, blunt wings. They fly at tremendous speeds. Their audacity is beyond compare. They have been known to snatch a chicken or turkey poult from under the nose of a frustrated, fist-waving farmer.

The Cooper's, Sharp-shinned and Goshawks are the real chicken hawks. These streamlined killers subsist primarily on birds and poultry. In flight they flap and glide, flap and glide. Suddenly they spot their dinner and dive directly, even through thickets and brush on the helpless bird or animal.

Sharp-shinned hawk

This small killer is sometimes called "feathered lightning." He is likely to be confused only with the Cooper's and the Sparrow hawk. The Cooper's is larger than the Sharp-shinned. The Sparrow hawk is nearly the same size as the Sharp-shinned but his wings are long and graceful, while those of the Sharp-shinned are short and blunt. The Sharp-shinned hawk also lacks the reddish brown coloring on the back which is a Sparrow hawk's trade mark.

Cooper's Hawk

The Cooper's hawk is a big brother to the Sharp-shinned. His added size enables him to take larger poultry and game birds. In most cases where a farmer is losing chickens he is losing them to a Cooper's hawk. If any bird is a "chicken hawk" this fellow gets the dubious honor. His size is about that of a crow. He has rounded wings, and long, narrow tail. He flies at high altitudes until he sights his prey, then darts on the victim, sinking his talons in its back.

The Rodent Patrol

In the second group are the Buteos often called the mouse hawks. They have broad wings, heavier bodies, shorter tails than the Accipiters, and are slower in flight. They police the landscape by gliding and soaring in lazy circles over fields and marshes. This habit makes them easy targets and many die for the crimes of the Accipiters. Unless one is sharp-eyed, the two groups are difficult to identify.

The Buteos have little fear of man and often hunt the fields and woods right up to the barnyard. They usually perch in the open, often on the top of a dead tree, a perch that gives them a command of the surrounding countryside. The farmer has few better friends in the bird world than the Buteos.

Red-Tailed Hawk

The tag that identifies this rather large hawk is his red tail which shows in a flight as he wheels in the sunlight. As he flies his tail is spread fanwise. He flies in ever-widening circles climbing constantly higher. When in search of food he perches on a dead limb in a high tree and watches until he locates his prey then dives on it.

Red-Shouldered Hawk

The adult Red-shouldered hawk has reddish brown underparts and a dark colored tail barred with white. When the bird is on the wing his red shoulder patches are visible only from above. He eats mostly mice and insects which he gathers from the wet low-

lands and marshy areas which he inhabits. He is seldom found in rocky regions or in the high hills.

Broad-Winged Hawk

Looking up at the underside of this bird while he is in flight one can identify him by his almost pure white wings tipped with black, and by the white tail bands on a dark background. As hawks go, this is the gentle one. He eats primarily those insects, snakes and rodents that farmers like to get rid of.

Rough-Legged Hawk

This is a hawk that the farmer could afford to have more of. The Rough-legged hawk eats mostly mice. He flies back and forth close to the ground over meadows and brushlands in search of food. He is about the size of the Marsh hawk and could be confused with him if it weren't for his sluggish labored flying which contrasts sharply with the graceful flight of the Marsh hawk. He gets his name from the fact that the front of his legs are entirely feathered.

Marsh Hawk

The Marsh hawk is a bird of the marshes and meadows. He flies tirelessly at low altitudes back and forth across his hunting grounds. His diet includes items that are both good and bad from the farmer's viewpoint, but careful studies of his food habits recommend that he be spared. The vermin he destroys far outweigh the occasional quail or rabbit he eats. Marsh hawks nest on the ground in the pastures and meadows. They are easy to recognize in flight by the pure white v-shaped patch of feathers at the base of the tail. When on occasion, he flies high overhead he may be known by the long squarish tail and long narrow wings.

Sparrow Hawk

The most common and one of the most beneficial hawks on American farms is the tiny Sparrow hawk, little larger than a robin. He is a bird of beautiful colors and often shows them off as he perches on a telephone pole or hovers in one spot over a pasture field. He could be more accurately named the grasshopper hawk, for two-thirds of his

"The Cooper's hawk likes young, tender fowl. On a killing spree, it can cause a farmer many anxious days. No state protects him by law."

Karl Maslowski Photo



diet is grasshoppers. He has speed and can maneuver like a jet fighter. His wings are long and pointed and his tail is long and narrow.

Almost without exception the farmer will find an Accipiter, either a Goshawk, a Sharp-shinned hawk, or Cooper's hawk responsible for any and all casualties to his poultry flock. They should be exterminated if they give trouble. All others should be preserved, protected and cherished as friends. In some states all but the Accipiters are protected by law; they are on the blacklist everywhere.

How To Protect Poultry

The positive method of dealing with gangster hawks is the shotgun. This is easier advised than carried out, for a hawk has a better pair of eyes than any farmer and can be as wary and wise as a crow. The farmer who finds a hawk raiding his poultry should study the hawk's habits. Watch from which direction it arrives and which way it departs; observe the time of day it makes its calls. Once the hawk's schedule and route is discovered, a farmer can anticipate the robber and be ready with the shotgun. Ted Igo of Clermont County, Ohio, followed this plan when a Cooper's hawk started making inroads on his spring chickens. He studied the hawk's time of arrival and departure. When he felt that he understood the bird,

he hid in a sycamore tree just before the hawk was due in for lunch. Igo got his hawk the first day. When there is no tree or other natural cover close to the chicken yard, a corn shock makes a ready blind for a close range shot.

To be on hand at all times to protect the flock from a particularly active hawk is impossible. Therefore, the pole trap comes in handy as a last resort for catching the desperado. The pole trap is what its name implies—a pole with a trap set on the top. The chain on the trap is, of course, fastened to the pole. The idea is that the hawk likes to perch high to look over the situation. The high pole in the poultry yard looks inviting. However, it should be remembered that while a pole trap is meant for a chicken killer, the trap doesn't know that and will snap anything that releases it. Bluebirds and robins as well as beneficial hawks will be caught.

Some states outlaw the pole trap. If you feel a trap is necessary, take it down as soon as the villain is trapped.

A wire roof over the yard is out of the question where poultry is ranging in pastures.

Some farmers swear by guineas which sound the alarm when a hawk flies near. This the guineas will do if they see a hawk, but unfortunately they shriek just as loudly at a piece of wind-blown paper.

They're Characters

Hawks have a lot of interesting habits. I recall the day I found a Cooper's hawk inside my pigeon coop. Apparently the hawk "swooped" on a pigeon sitting on the ledge of the barn. The pigeon managed to dart through the hole into the coop. The hawk, bent on squab for lunch went in after the pigeon with utter disregard of its own safety. The hawk lost its head when it found itself suddenly confined in a small coop and dashed against the wire covered windows in an effort to get out. After it was removed it took hours for the pigeons to settle down. Many nests of eggs were chilled.

Hunters have pointed out that hawks kill game birds and animals and are therefore deserving of the same fate.

Some of the earlier beliefs about the damage done to wildlife by hawks have been disproved. The Rough-legged hawk was once considered a villain who dined at random on waterfowl. Since then careful investigations have proved that he eats mostly mice. Especially will the Cooper's and Sharp-shinned take quail and pheasants when they get the chance.

Herbert Stoddard of Thomasville, Georgia, the foremost expert on quail in the U. S., says he has found that Marsh hawks tend to concentrate in the winter in areas where the

(Continued on Page 28)

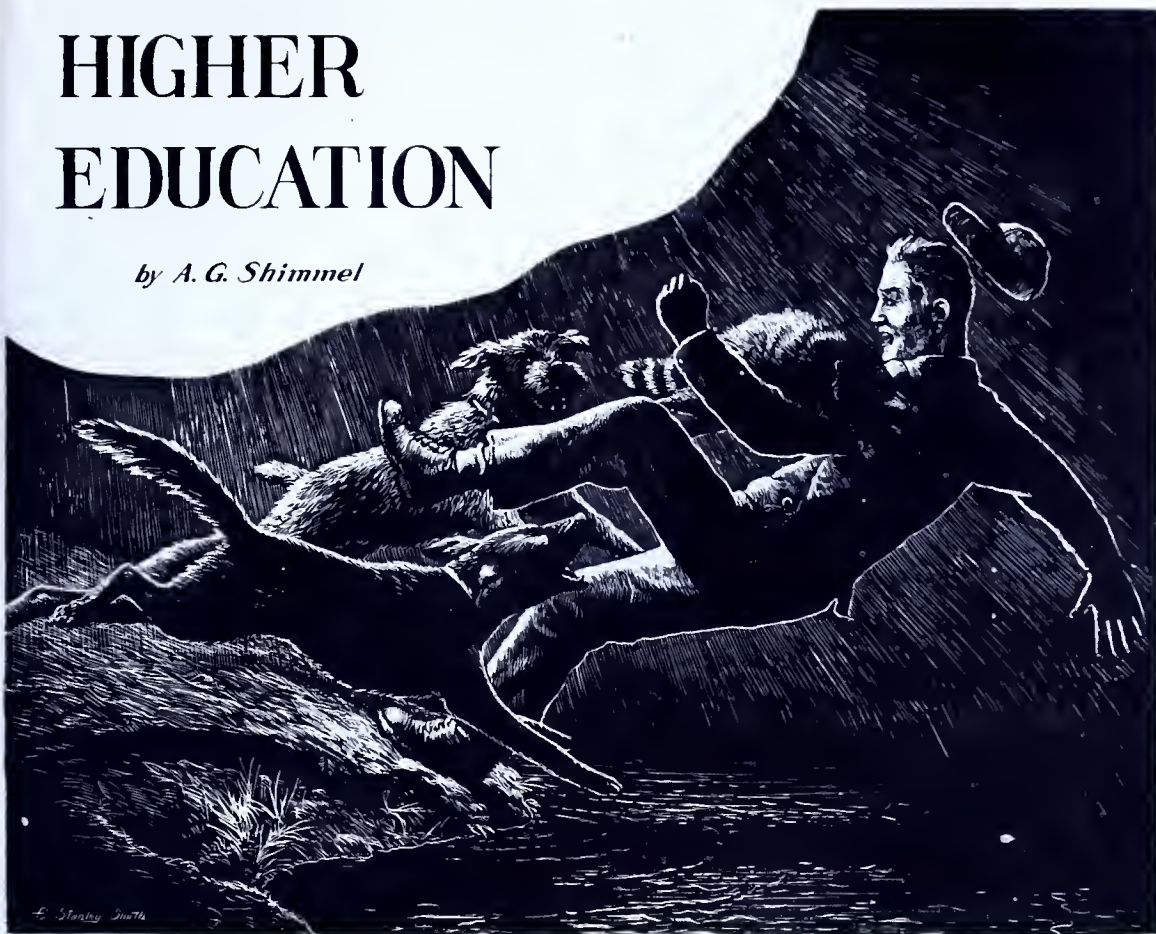
The sparrow hawk, little larger than a robin, works hard for his keep. He'll eat grasshoppers for every meal with a side dish of rats and mice.

Hal Harrison Photo



HIGHER EDUCATION

by A. G. Shimmel



It is a strange fact that, although the human olfactory organs are among the poorest in the animal kingdom, in the matter of memory we are sometimes literally led by the nose. The damp air of the late October evening carries a hint of spicy cider apples heaped in the hill orchard, the cool earthy fragrance of frost ripened leaves, but to my searching nostrils there is something lacking. As I walk slowly, scuffling the fallen leaves, that insistent prodding in the back of my mind goes on. Suddenly I remember, it's coon hunting time and I miss the odor of acetylene gas escaping from the battered miners lamp that formed a part of my hunting gear a quarter century ago.

Having completed my elementary education in the district school, I expressed a desire to attend school in the nearby city. My father, possibly fearing the softening effects of a city environment, decided to parallel it with education of a different sort.

In early September there arrived from Kentucky a letter containing an official looking pedigree, an acknowledgment of the receipt of a certain amount of money, and a shipping notice to the effect that the product of those impressive ancestors, American coon hounds, would arrive shortly.

Joe, for that proved to be his name, failed to conform to the picture in my mind. No hound ever looked like the specimen that stepped from the shipping crate. Detailed inventory revealed a blocky head; slightly wrinkled forehead; short battle fringed ears; a bushy shepherd tail; a wiry coat of black, white and tan with a blue ticked overlay at the fore legs. Truly his eighty pounds carried the stamp of a syndicated ancestry.

With Joe and Pepper, the farm Airedale, we roamed the autumn woods and filled the night with clamor. The hill farmers were much disturbed until they discovered we were noisy but harmless. Indeed, we were welcome by many when they found that hen house raiding vermin could be trailed and dispatched efficiently and at the same

time be an excuse for adventure in their otherwise routine lives.

By Joe's second season his fame was assured and his popularity brought plenty of hunting companions during the autumn and winter. While Joe worked up a feeding trail near a farm house, we often heard a friendly hail and were joined by the farmer, who sometimes finished dressing as we followed the challenge until it changed to the steady chop beat of "treed." After the coon or 'possum had been dispatched, it was imperative that I return with this hospitable son of the soil and share a bit of refreshment in the farm kitchen.

Among the many men from all walks of life that came to follow Joe and Pepper was a certain minister. He owned a fine pack of cooners, but nevertheless came many times to follow my pair for an evening.

Our method of hunting was simplicity itself. Climbing a ridge we selected a comfortable spot and waited while the pair combed the valley below. If a strike was not forthcoming, they returned and were directed into the other hollow. If we did not move immediately, Joe would sit down and howl at us until a move was the price of peace. He would hunt the new location until it had been covered thoroughly, then return and urge us vocally to move again. Plainly he wanted us to understand that he was running the hunt and would not tolerate loafing.

Returning one night from a fruitless circuit of the surrounding hills we traveled an old logging road with the hounds ranging just outside the circle of our lights. Suddenly the stillness was shattered by the thunder of their full cry and within a few hundred yards they settled into the steady chop of "treed." We sprinted toward them unmindful of the whipping branches that stung our cheeks and clutched at our clothing. Almost before they had settled around the small red oak we were probing its upper branches with our lights. It was with some disgust that we located a pair of half grown ringtails

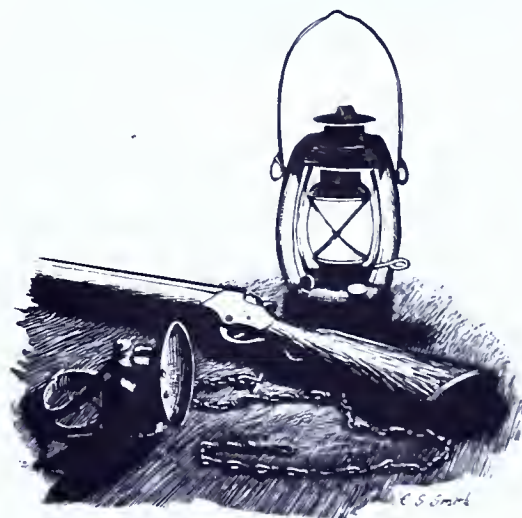
huddled together on one of the branches. We practiced a crude conservation even in those days and had an unwritten agreement that the killing of anything but adults was taboo. The minister suggested we chain the dogs and shake out this pair and have another run before quitting for the night. Securing the dogs to a nearby sapling the preacher shed his clerical dignity, and scrambled up the tree and shook the little rascals to the ground. The dogs struggled against their chains and raged at seeing their prey disappear into the darkness. It was a matter of a few minutes before they could be freed to again take up the trail. A quarter mile around the hill they barked up a somewhat larger tree. The preacher, his hunting blood now thoroughly aroused, suggested that, as the chase was leading up toward home, we might as well give the dogs a final bit of exercise.

I tossed the chains to him, but he declared that it took too long to unfasten them and he felt perfectly capable of holding them by the collars. When I had gained the branch on which one of the coons was perched, I glanced down to make sure all was ready. The minister had a grip on a dog collar with each hand and had planted his heels securely as he sat on the steep hillside just above the tree. To hold eighty pounds of rampaging hound in one hand and fifty pounds of excited Airedale in the other is not an easy thing to do, yet the Reverend seemed to have both under control.

It took a bit of persuading before the stubborn little coon would leave his haven. As he tumbled, I glanced again at my friend. The dogs surged forward and my friend lost his heel hold and was thrown forward down the hill. Even in this circumstance he never lost his iron grip on the collars until the dogs, trying to pass on opposite sides of my tree, brought him up sharply. The shock could be felt where I was clinging to the rough bark many feet above. The demise of the little ringtail was swift and efficient.

The Reverend scrambled to his feet, made an exploratory examination to assure himself that his shoulders would still function; then proceeded to perform a post-mortem. His verdict was that said victim had come to an untimely end by reason of a certain

(Continued on Page 27)





Animals Have Habits, Too

By Frank J. Floss

MOST of us were taught by our early natural history teachers that domestic animals like the dog, horse, and cow still retain habits that originated with their ancestors. For example, the horse gets up on its front feet when rising from the ground. This habit originated when the horse was almost entirely an animal of the plains. When danger threatened, the animal naturally raised up on its front feet first so that it could look over the tall grass and see from which direction its enemy was approaching.

The cow, on the other hand, does just the opposite. It raises up on its rear legs first. This manner of rising comes from a habit acquired ages ago too. Cows used to be forest dwellers and of necessity they raised up on their hind legs first so that they could see under the lower branches of trees.

Like the horse, the dog is claimed to be a plains animal. This ancestry is supposed to account for his habit of padding around in a circle two or three times before lying down. Some believe that he acquired this habit from tramping the plains grass down for a bed while others claim that he did it to find out from which direction the wind was blowing. Then he could lay down with his nose to the wind in order to scent the approach of enemies.

Thus you can see how easy it was for animals to form habits ages ago that their present day descendants have inherited in practically an unchanged form. Early in

youth I acquired the yearning to know more about animals and their habits. This fascinating pastime has led me half way round the world. I've watched moose feeding at the edge of a Canadian lake, thrilled to the sight of a chamois in the Swiss Alps, followed the wild boar across an English moor, played hide-and-seek with the Muffle Sheep of Bavaria, and trailed the swift whitetail deer in my native Pennsylvania. All of this I have done simply because I've wanted to know more about these animals. And through this constant trailing and study, I've learned many things about animals that escape the casual observer. While it is true that my observations in most instances bear out what students of natural history have been taught, in many instances my observations do not confirm what many people have been led to believe.

Now let's take a look and see how these habits were acquired. For the most part our present day animals have habits that are hereditary—transmitted from parent to offspring. Therefore, it can be seen that most habits stem from the fact that certain species had to employ tactics to fit their every day needs in order to survive way back in the dark, dim ages. They practiced these aids to survival in their daily or nightly rounds so often that the execution of these protective measures became an instinctive habit rather than a carefully thought out plan.

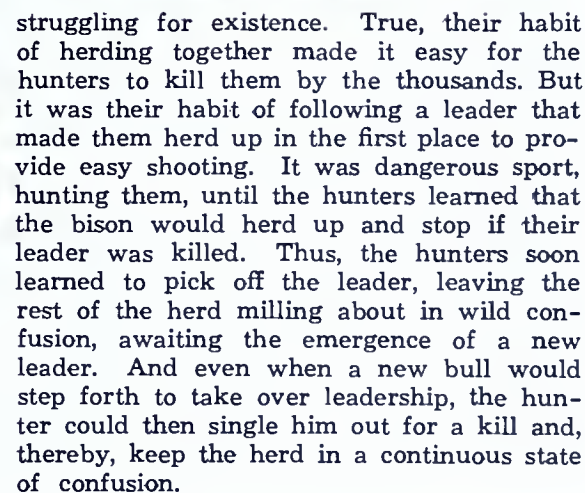
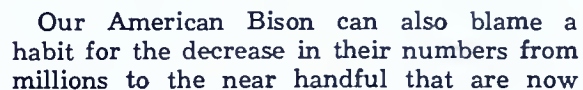
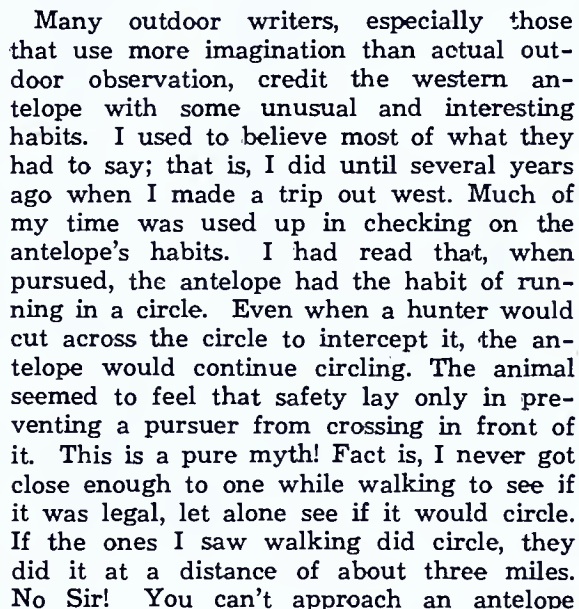
However, today the animals who still re-

tain the habits of their ancestors are usually easy picking for the skilled, modern hunter. For by studying an animal's habits, the hunter knows just where to look for his game and he is well equipped to bag it once it is found. You can be sure that if it wasn't for the retention of these old established habits, hunting would never have gained the prominence that it has. If hunting were a hit or miss venture with the quarry entirely unpredictable, few hunters would have the grit or fortitude to follow a game trail to the end.

If you have ever walked up on a mother quail or grouse with young, you no doubt have been amazed at her broken wing act which she uses to draw your attention away from her babies. Actually you are witnessing



Now let's take a look at the well known whitetail or Virginia deer which is credited by some armchair naturalists with seldom seen habits. For instance, the buck deer is supposed to have the habit of prancing through the brush with a springy, exuberant step, antlers held high, and tail pointed at the sky. To such imaginative thinking as



WILDLIFE CONSERVATION COSTS IN PENNSYLVANIA

By Nelson E. Slaybaugh
Comptroller

A Report on the Finances of the Game Fund
During the Fiscal Year
June 1, 1949 to May 31, 1950



"Father Time" has made another round with his scythe, which reminded us to contact the Editor of the GAME NEWS about reserving space in the August issue to publish our Annual Report—the earliest date that a Commission report has ever been officially published.

Your Commission has given and will continue to give its best efforts to provide better sport and better hunting—not only for the present generation but to those destined to follow. We hope the days you spent afield since our last report were both successful and enjoyable and your experience may be repeated many times in the days that lie ahead.

Have you ever thought of the similarity of the work of the Game Commission to that of industry? Let us here record just a few of the striking similarities. Industry is organized and operated for the purpose of realizing a profit on the investment. If it is successful the report which shows the condition of the business tells the story—an operating profit distributed to the stockholders in dividends. Your Commission is actually similar to a manufacturing plant. Its finished product is wildlife and it requires an abundance of it to meet the increasing gun pressure. The Commission, like industry, is not without its production problems. Among many objectives to achieve are: (1) providing an adequate supply of food, cover and protection for wildlife; (2) propagating, purchasing and distributing desirable wildlife in suitable areas; (3) developing sportsman-farmer relations with a view of keeping posted land to a minimum; and (4) conducting an intensive conservation educational program to enlist the interest and cooperation of sportsmen and others in protecting our wildlife and in perpetuating our heritage—the great out-of-doors and hunting as we enjoy it in America. These problems are complicated, therefore are by no means easy to solve. Wildlife workers and many of those who have joined hands with them are doing everything possible to increase the wildlife population and thereby improve the sport—a hurculean task.

There is a way of measuring the success of the wildlife program. It differs from the report on the condition of an industrial plant in that the dividends cannot be measured in dollars and cents. Instead of it showing net profits or dividends in dollars and cents it should result in many happy days afield, at least a partially filled game bag and a well-planned wildlife program that gives both promise and assurance for the future. Everything within the Commis-

sion's power with the funds at its disposal is being used to achieve these objectives.

The achievements are a matter of public record—and the Commission has considerable pride in its progress and accomplishments. Since the Commission's chief commodity is wildlife, its management program is geared to give it the maximum protection, and those who finance it a satisfactory return on the dollar. It is impossible with figures, set down on paper even in the simplest way, to explain adequately the comprehensiveness of the management work, or the sacrificial services of those who take part in administering the affairs of the Commission. To cite just one example, the Game Protector cannot lead a normal life to the extent men who have regular working hours enjoy because he is subject to beck and call all hours of the day and night seven days a week. Nor is it unusual for an administrator to work from 75 to 100 hours or more per week. They are interested in the work and their lives are dedicated to it. Furthermore, there are eight public-spirited men who give freely of their time, effort and money to serve the people of Pennsylvania in the capacity of Game Commissioners for which they receive absolutely no compensation. In conservation these eight men constitute what the Board of Directors is to a large industrial organization. How many lines of endeavor or what other employes in Pennsylvania can match such devotion to service?

The Commission's conservation education program, among its many other functions, aims to acquaint all with its State-wide activities and the purpose thereof, and to enlist their cooperation and help. A program which reveals facts and needs can enlist help and achieve results. However, the Commission maintains an open-mind policy and always welcomes suggestions for improvement. Those who offer suggestions should not feel discouraged if they are not adopted because policies and programs must be considered from a State-wide basis to accomplish the most or best for the greatest number of people. This often means that purely local problems or conditions must be woven into the entire fabric, realizing that the finished product is not perfect from the standpoint of inspection by all. It is impossible to satisfy everybody with everything. There are so many diversified interests and many are in direct conflict with others.

Another year of wildlife conservation in Pennsylvania has ended. It can be used as a stepping stone to better days ahead in proportion to the extent we utilize our experience and ability to improve, adopt policies

and develop better and more economical methods to manage the State's wildlife program.

As heretofore stated, we cannot rely on figures to carry the message on conservation, but we believe everything possible is being done to improve the crop of wildlife in Pennsylvania and to keep the Keystone State among the leaders in game management and restoration in our Nation. We are sure that much progress and many improvements are being made.

Our financial picture is not complicated, as will be revealed by the following highlights. For the fiscal year beginning June 1, 1949 and ending May 31, 1950, we relate the following simple story:

Beginning the year with a Cash Balance in the State Treasury in the amount of \$1,407,495.15 and a balance of \$6,576 in a local bank for the payment of bounties, we had a cash balance in the Game Fund of \$1,414,071.15.

During the year we received monies from various sources which were deposited in the Game Fund as follows:

Hunters' Licenses (after deducting the Issuing Agents' Commission) ..	\$2,901,432.36
Game Law Fines ..	197,364.10
Special Game Permits (Fur Dealers, Taxidermists, Game Propagators, etc.) ..	17,710.00
Interest on Deposits ..	13,016.00
Sales of Forest Products from Game Lands ..	68,006.05
Sale of Animal Skins ..	8,281.86
Sale of Unserviceable Property and Equipment ..	590.56
Rental from Commission-owned Buildings and for Rights-of-way ..	13,876.22
Sale of Publications (principally GAME NEWS subscriptions) ..	37,237.91
Federal Aid for Wildlife Purposes (75% of cost of approved projects) ..	691,693.23
Miscellaneous Items ..	11,527.02

Total Receipts from all sources deposited in Game Fund during the year .. \$3,960,735.31

With the amount on hand at the beginning of the year (\$1,414,071.15) and what we deposited during the year (\$3,960,735.31) there was accumulated from all sources \$5,374,806.46.

During the year \$3,651,823.52 of the total sum accumulated was spent for the following purposes:

Executive Office, Accounting and Office Expenses ..	\$ 158,697.79
Propagation, Purchase and Distribution of Game ..	776,720.05
Research for Wildlife Improvement ..	115,145.70
Conservation Education ..	202,110.35
Training of Personnel including Class of Student Officers for one month ..	44,591.99
Land Utilization Operations throughout the State ..	1,540,632.84
Wildlife Protection including Law Enforcement ..	696,078.72
Payment of Bounty Claims and Administrative Expenses relating thereto ..	117,846.08
Total ..	\$3,651,823.52

Under a new system which became operative last year, all bills were paid by the Treasury Department as of May 31, 1950, thereby automatically bringing the accounts of the Commission and Treasury Department into complete agreement. Since there was accumulated \$5,374,806.46 and there was spent \$3,651,823.52 we came to the end of the fiscal year with a cash balance of \$1,722,982.94. The new system was arranged for the purpose of eliminating any confusion about the true cash balance in the Game Fund at the end of the fiscal year—May 31.

It is apparent that there is one thing about our finances that seems to confuse many people. For this reason it has been decided to explain this phase of the financial picture in every annual report, expressly for the benefit of new subscribers. Sportsmen are confused about the need of a large cash balance at the end of each fiscal year. They say "Why do you need a large cash balance as of May 31 each year?" "Why don't you spend it?" The simple answer is just this—during the months of June, July, August and September of each year, the work must go on and be paid for as usual, but that is a very lean period for receipts, so unless at least \$800,000 is saved from money accumulated and on hand each June 1, the work could not go on and be financed between June 1 and September 30. In other words, the bill to be paid during those four months are about \$800,000 more than the money received for the same period. Simple, isn't it, when you know the facts? So instead of spending all the money accumulated each fiscal year, a sufficient sum must always be saved to pay the bills during the lean period of receipts that follows or during the four months, June, July, August and September. By October 1 each year the new license money starts to come in and from that time there is sufficient money received currently to finance the program undertaken to the end of the fiscal year.

The \$800,000 provides only for the regular annual lean period of receipts but nothing for emergencies that could arise. What do you suppose would happen if the opening of the hunting season were delayed by Proclamation of the Governor due to extremely dry forest and field conditions which could result from a prolonged drought? It could easily delay the receipt of monies and develop a very serious financial situation since the Commission has no means by which it can borrow any money for any purpose at any time. These facts should make any person realize that the Commission must be both businesslike and careful in its financing.

The question that can be raised this year is why the cash balance as of June 1, 1950 is in excess of the absolutely essential minimum of \$800,000. There are two reasons for this condition at this time, viz. (1) The actual collections during the fiscal year exceeded the estimate by \$500,610.31. Of this total amount \$291,693.23, or about 60%, represents Federal Funds that were received earlier than had been estimated. This earlier collection was the result of the expansion of the food and cover program which is being financed under Pitman-Robertson agreements, and permits the receipt of the Federal Funds promptly after the completion of the work and on a more current basis; (2) The new program under the increased hunting

license fees required the building up of an organization to utilize wisely and effectively the additional funds. This could not be done without careful planning which required time. Therefore, the program had to be developed carefully and was not under way during the full year. This resulted in approximately \$400,000 that was not actually expended but has been included with the \$500,000 additional receipts in the following year's budget to finance the expanded program.

Questions concerning any published report, such as "Are the figures correct?" "Are the accounts in order?" are timely and certainly apply to the Game Fund.

By an Act of General Assembly, the Auditor General is required to audit State Departments, Boards and Commissions. At the time this article went to press no formal audit for the period had been made. However, every bill of every kind is audited by the Auditor General before payment is made. The application of sound management and business practices employed by the Game Commission is further attested to in the audit reports for the five previous fiscal years, which contained no criticism or suggestions for improvement. Since the same high standards were maintained during the year reported herein, it is reasonable to assume that the audit, when made and a report filed, will show that the affairs of the Commission were handled in an equally efficient manner. We try to improve our operating machinery constantly.

The foregoing is the simple story of our finances for the last fiscal year.

Now For The Details

Our Annual Report must satisfy not only the persons who want a quick picture but also those who desire details. It is believed the foregoing material will meet the requirements of the first group. However, for the benefit and information of the latter group, certain statements and charts are made available with this article. By looking at the chart and referring to Table No. 1, you will find in greater detail the functions for which the monies were used and the number of cents of each dollar expended that was used for each purpose.

By referring to Table No. 2, you will find the cash balances in the Treasury Department at the beginning and ending of the fiscal year, the receipts from the various sources during the year and the total funds available during the year. It also shows the various classifications of expenditures that comprise the total cost of each organizational unit as well as the total spent by all units for each classification.

State-wide Field Operations

The bulk of the Game Fund expenditures is spent for land utilization and wildlife protection operations, including law enforcement—all field activities. Believing there is a general interest in the field operations and the amount spent for each activity, we are giving below supporting details:

Wildlife Protection	
Game Law Enforcement on a State-wide Basis	\$472,680.16
Proportionate Share of Field Division Office Administration	69,691.58
Various kinds of essential field services not directly chargeable to items herein set forth	41,506.79
General Administrative expenses chargeable to Wildlife Protection	31,561.14
Activities in connection with the control of predators	22,706.45
Cooperating with Conservation and Law Enforcement Officers	20,902.29
Investigating Game Damage Complaints	17,289.51
Payment to Retirement System for Employees	12,555.96
Cost of Issuing Special Permits of Various Kinds	7,184.84
Total Cost during the Fiscal Year for this purpose was	\$696,078.72
Land Utilization	
Food and Cover Projects on State-owned Lands	\$538,002.76
Maintenance and Development of State Game Lands and Primary Refuges	247,133.54
Purchase of Land, including Title and Survey Costs	87,336.70
Development and Operating Farm-Game Projects	112,614.52
Establishing and Maintaining Farm-Game Projects	70,727.63
Protecting Farm-Game Projects	26,905.41
Proportionate Share of Field Division Office Administration	99,559.30
Conservation Development Work in Cooperation with Federal Government	83,401.03
Purchase of Equipment (trucks, tractors, graders, etc.)	69,948.74
Feeding of Game in the Wild	55,505.03
General Administrative Expenses Chargeable to Land Utilization	44,039.11
Various kinds of essential field services not directly chargeable to items herein set forth	43,910.63
Maintenance of State Game Propagation Areas	14,468.58
Waterfowl Impoundments and Resting Areas	10,708.14
Payments to Retirement System for Employees	9,969.94
Building Construction on State Game Lands	9,511.08
Establishing and Maintaining Rabbit Farms	8,448.89
Maintenance and Development of Auxiliary Game Refuges on Privately-owned Lands	7,003.66
Maintenance of Dog Training Areas	1,438.15
Total Cost during the Fiscal Year for this Purpose was	\$1,540,632.84

Earmarked Fund

An amendment to the Game Law by the 1949 General Assembly restricts the use of \$1.25 from each Resident Hunter's License fee for improving and maintaining natural wildlife habitat that is available for public hunting; the purchase, maintenance, operation, rental and storage of equipment used in this work; the purchase, distribution, planting, cultivating and harvesting of game foods; the purchase, trapping and distribution of all species of game, as well as providing protection to the property of Farm-Game Cooperators.

During the year which ended May 31, 1950 there was spent \$1,211,687.72 for all operations chargeable against this earmarked money. On the basis of preliminary reports, subject to slight change, there were 801,459 Resident Licenses issued during 1949, making \$1,001, 823.75 available to finance these operations. Therefore, the Commission spent \$209,863.97 in excess of the minimum amount required by law.

Capital Investments

A report on the Game Fund expenditures would not be complete without some explanation about the essential working tools of the Commission. To produce a shootable supply of game and provide natural habitat with adequate food and cover requires land, game farms, buildings, pick-up trucks, heavy motorized equipment, etc. Money spent for such items is commonly referred to as "Capital" expenditures. To the extent that it would be impossible for any large industrial plant to get along without making capital expenditures for land, buildings, equipment, etc. so it is with the Game Commission. The table below gives the actual consideration paid for land, together with the estimated value of other items as of May 31, 1950:

State Game Lands (1920-1950)	\$4,193,937.42*
Buildings on State Game Lands	132,245.00†
Game Propagating Farms (including land, buildings and equipment) ..	623,545.33†
Conservation School (including buildings and equipment)	32,959.45†
Equipment (including automobiles, trucks, tractors, graders, etc.)	232,290.57†
Total	\$5,103,545.69

* Consideration paid for lands including title and survey costs.

† Estimated value at May 31, 1950.

Hunting Licenses Issued

To give you information on the general trend of hunting license sales since the license law was enacted in 1913, license sales at 5-year intervals from 1913 to 1938, and yearly from 1939 to 1949 are here shown:

Year	Resident	Non-Resident	Total Licenses
1913	305,028	No Record	305,028
1918	311,290	478	311,768
1923	497,216	2,328	499,544
1928	437,727	1,190	438,917
1933	524,337	4,966	529,303
1938	654,146	7,584	661,730
1939	653,852	9,049	662,901
1940	666,420	12,748	679,168
1941	675,434	10,922	686,356
1942	640,821	8,394	649,215
1943	570,901	11,833	582,734
1944	593,917*	13,983	607,900
1945	696,394*	17,227	713,621
1946	832,846*	23,174	856,020
1947	822,423*	28,012	850,435
1948	854,840*	28,085	882,925
1949†	801,459†	23,894†	825,353†

* Includes free licenses issued to members of the armed forces: 1944, 264; 1945, 32,373; 1946, 7,418; 1947, 2,876; 1948, 3,770; 1949, not available at this time.

† Preliminary report, subject to minor changes.

HOW THE GAME FUND DOLLAR WAS USED

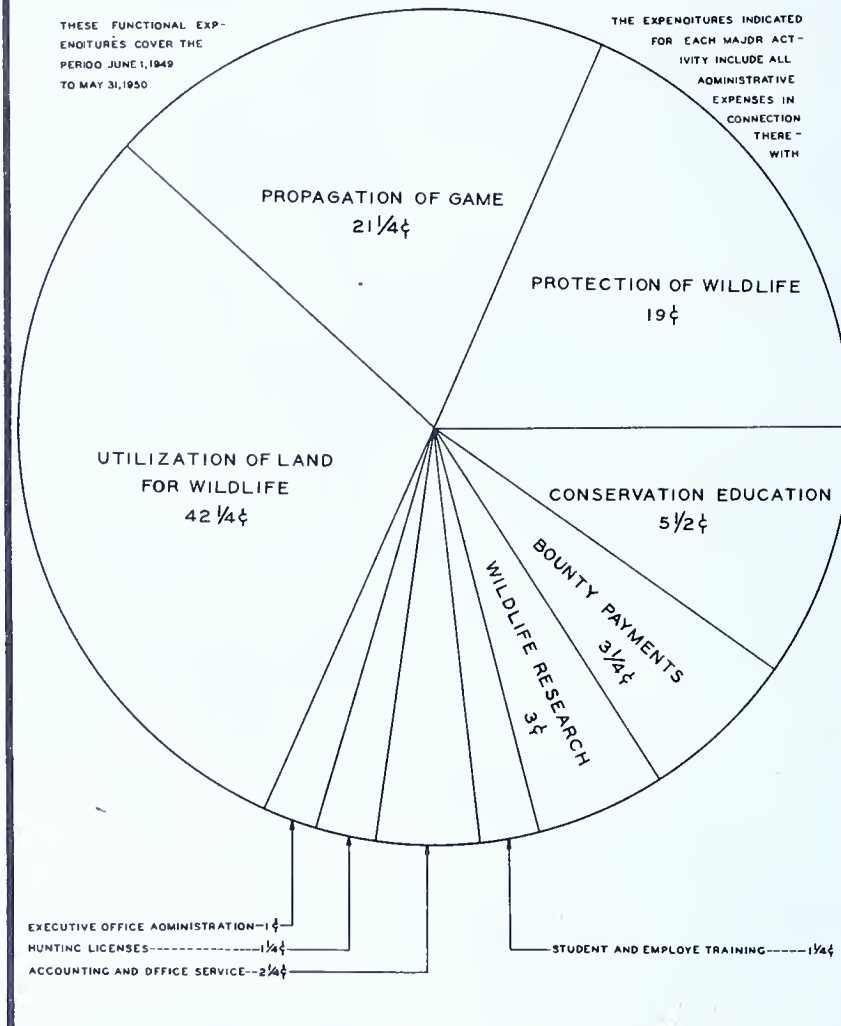


Table No. 1
SUMMARIZATION OF EXPENDITURES BY FUNCTIONS
FISCAL YEAR ENDING MAY 31, 1950

		Part of Dollar
Utilization of Land for Wildlife. Management of State Game Lands, Cooperative Farm-Game Projects and other leased areas totaling 1,749,817 acres. Also fixed charges in lieu of taxes	\$1,540,632.84	42 1/4c
Propagation of Game. Operation of game farms, purchase of game, wild game transfer, distribution of game	776,720.05	21 1/4c
Protection of Wildlife. Salaries and expenses for enforcement of game laws, assistance in enforcement of fish, dog and forest laws, and numerous other field activities	696,078.72	19c
Conservation Education, Game News, publications, exhibits, motion pictures, radio broadcasts, attending Sportsmen's meetings, etc.	202,110.35	5 1/2c
Student and Employee Training. Training programs at the Ross Leffler School of Conservation for the Commission's officers, including school maintenance and class of Student Officers for one month (class enrolled May 1, 1950)	44,591.99	1 1/4c
Bounty Payments. Bounties on noxious animals including administrative expenses relating thereto	117,846.08	3 3/4c
Wildlife Research, Wildlife studies to determine practical methods for developing management programs	115,145.70	3c
Executive Office, Accounting and Office Service (\$158,697.79 subdivided below)		
Accounting and Office Service. Audit of accounts and bookkeeping, personnel matters; supervision over purchases, equipment and supplies	81,001.25	2 1/4c
Hunting Licenses. Including tags, applications, reports	45,566.76	1 1/4c
Executive Office, Administration. Salaries and expenses of Executive Office, and expenses of Commissioners	32,129.78	1c
Total Expended for all Purposes	\$3,651,823.52	100c

Table No. 2

PENNSYLVANIA GAME COMMISSION
STATEMENT OF REVENUE, EXPENDITURES AND CASH BALANCES
FISCAL YEAR JUNE 1, 1949 TO MAY 31, 1950

REVENUE

Cash in State Treasury to credit of "Game Fund" June 1, 1949	\$1,407,495.15	
Add: Advancement for the payment of bounties (to pay checks issued during previous year which did not clear bank until after June 1, 1949)	6,576.00	\$1,414,071.15
Receipts June 1, 1949 to May 31, 1950:		
Hunters' Licenses (After deducting the Issuing Agents' Commission)	\$2,901,432.36	
Game Law Fines	197,364.10	
Special Game Permits (Fur Dealers, Taxidermists, Game Propagators, etc.)	17,710.00	
Interest on Deposits	13,016.00	
Sale of Forest Products from Game Lands	68,006.05	
Sale of Animal Skins	8,281.86	
Sale of Unserviceable Property and Equipment	590.56	
Rentals from Commission-owned Buildings and for Rights-of-Way, etc.	13,876.22	
Sale of Publications	37,237.91	
Federal Aid for Wildlife Purposes (75% of cost of approved projects)	691,693.23	
Miscellaneous Items	11,527.02	
Total Receipts from All Sources		\$3,960,735.31
Total Funds Available During Year		\$5,374,806.46

CLASSIFICATION OF EXPENDITURES BY ORGANIZATIONAL UNITS

Classification of Expenditures	Exec. Office and Acct'g. & Ser.	Game Propa- gation	Wildlife Research	Land Utiliza- tion	Wildlife Protec- tion	Bounty Claims	Conserva- tion School	Conserva- tion Education	Total
Salaries	\$ 72,605.39	\$ 75,904.21	\$ 58,630.40	\$ 236,385.54	\$343,813.27	\$ 8,590.00	\$ 21,153.15	\$ 68,788.34	\$ 885,870.30
Traveling Expenses of all kinds, including auto mileage	4,881.26	16,233.21	19,333.91	72,167.38	134,099.14	45.04	5,681.08	15,713.18	268,154.20
Deputy Game Protectors:									
Wages	\$53,946.88								
Expenses	32,633.01				86,579.89				86,579.89
Cooperative Farm-Game Program (Total cost)		24,785.00		210,247.56					235,032.56
Wages (Land Management, etc.)			20,156.50	435,986.27	40,578.75				496,721.52
Wages (Game Farms, etc.)	7,022.73	133,790.47				2,820.31	6,370.73	5,433.04	155,437.28
Purchase of Game		207,623.95							207,623.95
Rabbit Trapping and Wild Game Transfer ..		63,593.71							63,593.71
Feed (For Game Farms and game in the wild)		123,103.42	116.00	26,653.22					149,872.64
Express and Cartage	476.37	1,408.87	456.68	2,502.37	1,884.41	18.82	481.32	265.56	7,494.40
Purchase of Lands (title and survey included)				87,336.70					87,336.70
Payments in Lieu of Taxes to local taxing units		140.04		43,517.09					43,657.13
Building and Construction (Mostly on Game Farms)		51,799.23		9,511.08			370.00		61,680.31
Repairs to Buildings, Grounds and Equip- ment by Contract	293.88	463.86		2,801.09	84.53	4.00	572.09	384.09	4,603.54
Equipment (Mostly for land management and Game Farms)	2,340.50	17,992.43	73.50	69,948.74	10,371.36	256.66	397.09	839.11	102,219.39
Miscellaneous Supplies	2,258.19	32,623.58	1,335.69	142,536.59	19,462.05	86.89	5,325.40	9,308.58	212,936.97
Motor Supplies	1,355.65	8,088.30	274.17	23,644.19	7,418.42	10.55	705.23	941.80	42,438.31
Light, Power and Fuel		6,566.43		517.95	266.36		1,150.90	1,583.54	10,085.18
Insurance	324.36	683.40	135.02	4,490.64	1,198.41	28.09	100.38	196.95	7,157.25
Postage, Telephone and Telegraph	11,826.62	1,016.74	241.59	11,999.97	12,286.30	471.08	363.81	4,728.60	42,934.71
Rental of Equipment, Offices, Auto Storage, etc.	518.66	7,318.80	762.29	142,338.32	6,395.84	492.99	48.00	3,223.61	161,098.51
Bounty Payments and Grants			6,000.00			104,635.00		3,409.75	114,044.75
Refunds of Receipts	55.15			5.10	3,946.67				4,006.92
Fees:									
Artists, Attorneys, Medical, Taxidermy, etc.		14.00	4,635.00	3,673.80	329.50		266.00	10,608.09	19,526.39
Bear Damage Claims					1,611.37				1,611.37
Other Maintenance Services and Expenses ...	982.80	74.56	18.33	586.51	1,265.50	150.39	555.04	1,302.76	4,935.89
Newspaper Advertising	41.90			251.20	7,461.02				7,754.12
Printing, Binding and Paper	5,488.46	195.22	832.92	3,561.59	4,469.97	202.26	269.15	72,797.30	87,816.87
Printing Hunters' Licenses, Tags and Misc. Forms—(Through Department of Revenue)	45,566.76								45,566.76
Contributions to State Employees' Retirement System—(Through Department of State) ..	2,654.11	3,300.62	2,143.70	9,969.94	12,555.96	34.00	782.62	2,586.05	34,027.00
Replacement Checks—(Through Department of Treasury)	5.00								5.00
TOTAL EXPENDITURES	\$158,697.79	\$776,720.05	\$115,145.70	\$1,540,632.84	\$696,078.72	\$117,846.08	\$ 44,591.99	\$202,110.35	\$3,651,823.52
Cash Balance in State Treasury to credit of "Game Fund" May 31, 1950									\$1,722,982.94*

* Excludes \$93,000 War Bond Investment which can be converted into cash when necessary.



THE BLACK BATTALIONS

By JACOB BATES ABBOTT

FROM the days of the early Virginia planters and of the rugged freemen who stepped ashore at Plymouth to found the Massachusetts Bay Colony, the agriculturist has been pointing the business end of a gun toward *Corvus Americanus*, probably the best known and least loved bird in America. Since the era of the 17th century blunderbus, loaded with half a pound of lead, scrap iron and pebbles, through the various stages of firearm improvement climaxed with our modern breech-loading Winchesters, Ithacas or Remingtons, carrying double charges of number sixes, lethal charges have been hurled at crows by irate farmers and sportsmen in protection of their sprouting corn, wheat, chickens, grouse, turkeys and pheasants.

Popular nature articles are filled with allusions to "Black Rascals," "Black Thieves," "Black Devils" and other stygian epithets; even the word "crow" has taken on an unornithological definition denoting meanness, poor quality, abandoned cunning and cruelty and a sort of cheap, rakehell vagabondery. And to anyone who has watched a crow methodically murder newly-hatched chicks within a few feet of the mother hen, or gobble up unfledged robins from a nest, most

of the definitive remarks hurled at crows seem justified, if not examples of understatement. Of course, I suppose that, to Mr. and Mrs. Crow, their actions are perfectly normal, indeed indicative of thoughtful parenthood, and that their forays to collect vegetable and animal food for ravenous youngsters is precisely comparable to any young parents who load up, as the budget will allow, the wire push-basket with family rations at the local A. & P.

It is during the spring months that crows exert their greatest influence, both good and bad, on man's possessions. This is when they eat his sprouting corn, most persistently kill his downy chicks and take heavy toll of his favorite game and songbird nestlings. Yet it is also in spring that crows give their most valuable service to farmers and truck gardeners by their destruction of injurious insects, particularly white grubs, the larvae of the May beetle and various short-horned grasshoppers and locusts. Nestling crows outdo their parents in voracious feeding on insect pests. Crows also act as an efficient control on destructive small mammals. This must be evident to anyone who has seen a squadron of black wings persistently beating back and forth across open fields, searching the grass tufts for nests of meadow mice. Meadow, white-footed, jumping and house mice form a substantial portion of the food of fledgling crows. Young cottontails are also high on the diet list of both young and adult crows throughout May.

Insects comprise a fifth of the yearly diet

of adult crows and this destruction of pests presents the strongest defense that the bird has, ecologically. May beetles, grasshoppers and caterpillars are put away in enormous quantities. This insect menu, added to the crow's readiness to feed on carrion, thus performing good service as a scavenger, represents the total of the crow's service to man. Defense rests.

It is remarkable that the crow population has not been decimated long ago. Certainly they have been shot at, poisoned, dynamited, robbed of their eggs, and persistently hunted by regiments of local bounty seekers for generations. It took us less than 300 years to exterminate 50 million passenger pigeons. In the opinion of several research naturalists, who have made extensive studies of the subject, there are, apparently, at least half as many crows around today as there were 150 years ago. The crow is probably the most conspicuous bird we have; he's noisy and he concentrates his numbers by thousands in winter roosts. Yet in spite of dynamite and spirited neighborhood barrages throughout the country, his numbers show no appreciable decrease. One reason for this may be found in the following quotation of Mr. John Bryant of Kansas City, writing to Mr. Frank Burns of Berwyn, Pa.: "As another case of this species' [crow] . . . acute sense of danger, I will relate the following experiment and its result. One day last May, while fishing, I noticed a crow in the top of a dead tree. It was constantly cawing and apparently watching me. Remembering the old

adage, 'A crow knows a gun,' I thought it a good time to test the saying; so, picking up my wooden fishing-rod case, I walked toward the tree where the bird was perched some 60 feet from the ground. Having reached the tree, I walked around the trunk and back to the creek, where I had left my gun, without the bird taking wing. On reaching the creek, I substituted my gun for the rod case, and again started for the tree. I had scarcely taken a dozen steps ere the crow decamped to another tree; nor could I approach within gun shot. I then placed my gun on the ground and attempted to get closer, but I found it as wary as before; the sight of the gun had destroyed all former confidence. On my return to the creek, my companion, who was further up the stream, called to me to bring my gun. I went to him at once, leaving the fish I had caught submerged in the water on a string. I was absent probably an hour. On my return . . . I observed the crow sitting on a tree above where I had left my string of fish. He cawed rapidly and flew away . . . I found nothing remaining of the fish excepting ten eyeless heads strung on the cord . . ."

With the exception of man, the crow's chief enemy is the great horned owl which, alone among all predators, seems able to stomach and relish a diet of crow. In retaliation crows will raucously mob any owl that they find abroad in daylight, harrying it from perch to perch, until *Bubo* dives into some deep thicket of tangled spruce or pine boughs.

(Continued on Page 28)

DEATH CLAIMS JACOB BATES ABBOTT

Just as this issue of "Game News" went on press, word was received that Jacob Bates Abbott, the author and illustrator of this article and long time staff artist for the Pennsylvania Game Commission died suddenly, July 14, while on vacation in New Hampshire. A full memoriam to Mr. Abbott will be printed in the September issue.





JUST YOU AND THE RATTLESNAKES

BY
JACK ANDERSON

THERE was no bridge, and the rattlesnake den, which in the distance frowned brown and dark gray and shadowy where elsewhere the Poconos smiled spring-green, was across Big Bushkill Creek. We stretched our forked sticks across a gray rock slab and used the sun-warmed boulders as chairs while stripping off shoes and socks.

"Maybe I should have cut my stick longer." Jake Kintz laughed as his chunky legs stabbed in the Bushkill. "It's too short to use as a cane and this water sure is swift."

Frank Smith, crab-footing it after Jake Kintz, sank his long forked stick between two stones and chuckled. "You sure should of cut that stick longer—but it's the rattlers I'm thinking of when I say that."

The leader of our party, Charley LeBar, seemed to dance bare-footed across the mountain stream. As caretaker of Easton Anglers' property he was no stranger to the territory—or to rattlesnake hunts. A kill of sixty-three rattlers in a single day was his record, and he showed contempt for the snakes by wearing low shoes and like Jake Kintz carrying a switch yard-stick size.

Rattlesnake hunting was a new adventure for me, final member of the party. Frank Smith and I wore high-top shoes and were talking more than usual—building up courage. As the icy Bushkill stroked my legs and gurgled around mossy boulders I wondered what awaited us, there where glaciers long past had dumped fat stones on a warm southern slope and invited cold-blooded snakes to their hospitality. I was glad Jake Kintz had the snake-bite kit tucked in a jacket pocket.

On the opposite side of the Bushkill Charley LaBar sat down and slapped water from his legs. "Second week in May is a little late. Late April and early October is best. I'm afraid most the snakes have left the dens."

"And I'm afraid they ain't left yet," Frank Smith laughed. "My wife calls us darn fools and I'd leave believe she was right. Jack wants to get some pictures but the rest of us—"

"Well, we want live snakes for this here bag," Jake said, exposing a burlap sack hanging at his meaty rump. "Game Protector Failor wants a few for the Mt. Pocono fire company carnival and we want some our junior sportsmen can show at their exhibit. And Charley here kills off as many as he can every year to give club members peace of mind."

This talk I heard while gingerly picking my way across stream. It was good to feel my feet on warm dry rock again. We sat and smoked in the sunlight for ten minutes, Charley LaBar telling us exactly where we were.

This was Monroe County, but only a few hundred yards from Pike County's wild Mosier's Rock district, favored deer territory. Two rattlesnake dens lay ahead. The first den was a half-mile distant. Charley had visited it two weeks before and taken six snakes. The second den was five miles beyond and hadn't been searched since pre-war days.

Finally we stubbed our smokes and picked along the rocks toward the den. I'd already learned one thing: a "den" isn't a spot where snakes gather like sardines to bask in sunlight. For example this rattlesnake den covered several acres. I tensely trailed Charley, Jake and Frank with a ready camera, around boulders, across rotted logs, and through sweet fern and brush. Hopes for snake pictures were dimming when Jake calmly reported, "Here's one."

Jake shifted his chew, but otherwise was granite-still as we scrambled up the slope toward that first snake. Soon I saw him, like a fat stick stretched in the leaves. He was sleeping, but suddenly a head the color of an olive shot up and he buzzed. Personally I class this buzzing with the cry of a locust, though others say it is of different pitch. As I walked closer to the snake I detected a rattle through this buzzing. Then the rattler whipped itself under a rock.

"Think he might have got in his hole?" Charley wondered, and then went on to find out for himself by prying the rock with a dead limb. Within two minutes Jake had the snake poked into the open and coiled and rattling. Nervously I nudged forward with camera and took my first shot. Then Charley pinned the rattler with a forked stick, got him behind the neck with his fingers, and dropped him into the burlap sack.

Success called for another smoke. Jake said through a nicotine fog: "I usually like to work dens from the top down as you can see the snakes better. You find more snakes near the foot of slopes than on the tops."

"We'll find them most anywhere today." This from Charley. "They've started to leave the dens. Those warm days last week livened 'em up."

"This fellow wasn't coiled," I put in, puzzled. "Aren't they usually coiled?"

"Sometimes," Jake said. "This one crawled out from under that rock and the sun felt good. He took a nap. But remember this, a rattlesnake doesn't lay out in bright sun, like folks think. He likes part-sun, part-shade. He's more apt to be between rocks than on a flat rock. That's why you see us poking under rocks with our sticks. If there's a snake there, he'll show himself by rattling."

Snake hunting was slowly taking hold of me. Here was the thrill of the chase with an added flavoring of danger. As Frank Smith

called to me after we resumed searching: "This is almost like an egg hunt. I can feel my courage growing by the minute."

But one snake ended our luck in the first den. Charley set us on the uphill woodland trail toward the second.

It was a fairyland trail through a woods bursting with hundreds of shades of green and pinked by wild honeysuckle. The climb was hard, much of it high above the Bushkill, which we saw sliding in silvery cascades and spilling narrow and foamy through dark rhododendron-choked passages below. We crossed a woods meadow, burned over lands, and finally faced a rocky ridge.

Frank said, "It's looking snaky again."

Charley LaBar turned and grinned. "It's been so long I ain't exactly sure where this den is. It's along this ledge somewheres."

We separated and started searching. The going was rough, glaciers having spewed rocks of myriad sizes and shapes, some now loose, some hooked firmly in earth. We moved snail-like, catching our breaths. The thought touched me that probably since Lenape Indians hunted here, rattlers had hibernated here. They left in late Spring and squirmed over the countryside. As cold returned and food got scarce, the serpents slid back to this spot where instinctively they knew protection and warmth awaited them.

That first rattlesnake had been of greenish color, but the second, which Jake spotted between two boulders, was gray-black. He was a medium snake, and after a quick rattle slipped under a boulder.

"A goner," Frank Smith said, without regret.

Jake didn't think so. He slid down between the rocks and tugged at the boulder. The rattler sounded off. Jake pulled and wrenched, and finally snake, boulder and Jake were tangled together as the rock "gave" suddenly. Jake came within six inches of sitting on the snake. It rifled shivers up my spine and I was happy when Charley pinned the rattler and Jake crawled toward me grinning and unharmed.

"You take too big chances," I opined to Jake with a shake of the head.

"That was kind of foolish," Jake admitted sheepishly. "When you lose your respect of a rattlesnake, watch out. I guess that's why one out of fifteen people bit by rattlers are handling them intentionally."

Now I had the feeling we were really among the timber rattlesnakes. And I wasn't wrong. Five minutes later we ran across the third, another black fellow. We paused then to discuss field identification of snakes. Believe me, color and markings are poor tags. There are no two timber rattlesnakes of identical color; they range from yellow to black. The cross-bands are obvious on one, obscure on another. A non-poisonous snake such as the pine snake has a head shaped almost like an Indian arrowhead, which the rattler also has. Only the rattle—I prefer to term it "buzz"—is quick certain identification.

The snakes came faster now, and I got an uneasy feeling. Charley LaBar found two small rattlers in a rotten stump fifty feet from our third snake. Jake Kintz suggested we leave these small ones for "seed" but Frank Smith and I quickly vetoed that idea. We dumped them into our burlap sack. Frank carried the bag, which sounded like a plague of locusts.

I'd gotten pictures of all this, but I had an ambition. "I wish I could meet up with one myself," I remarked.

Jake pointed toward the sentinel boulder of the ledge. "Work up that way," he suggested.

He seemed to have a nose for rattlesnakes. I walked twenty steps, rounded a boulder, and came face to face with the biggest rattlesnake of the trip.

A muscular black fellow, he was sliding toward me, but snapped on the brakes and lashed himself into a coil that was crested with an S-shaped neck and big motionless head.

With wicked pin-point green eyes he studied me, and a lump clotted my throat as I watched. His head was like a knot of black hemp rope. He waited, still, deadly, as if to say: "Your move next." I clamped down on fear and slowly advanced, forked stick extended. He rattled now, and it whirled on my nerves like a rasp. Then my stick was overhead and in a sudden move I drove it down on his neck and pinned him. He thrashed violently, and Jake's voice came approvingly from behind.

"That's the stuff—here, let me get him. He's a nice snake."

Frank Smith chuckled his way up the slope. "He isn't a nice snake yet. He ain't dead."

This rattlesnake was four feet long and had fourteen rattles.

When putting him in the bag, Jake first dipped in the tail, then thrust him downward. Meanwhile Charley LaBar spun the bag, shook it, and Jake securely tied it a foot below the spot where Frank Smith gripped to carry.

"Important to twirl the bag when you put in a snake," Jake cautioned. "Sometimes they crawl up the bag and might bite you."

Charley LaBar nodded. "No telling about a timber rattlesnake. Sometimes you can't get one to bite. Another time he'll strike quick as fire. Depending I guess on the mood he's in."

When I returned to the hunt I got to thinking about the six or seven miles between us and the nearest habitation, the fourteen miles or so to a doctor's office. In our innocent-looking burlap sack was death. A fang sinking into flesh was like a hypodermic needle, injecting poison to be carried away in the lymph and blood stream toward the heart. Death within two hours was possible: first local swelling and searing pain; then, as poison touched vital organs, prostration, convulsions, bloody discharges into the digestive tract, and stoppage of breathing. Even experienced snake men on occasion lost control after being bitten, running themselves to death or becoming too frightened to act quickly.

Of course I knew what to do, if I wasn't too excited. First the tourniquet above the bite. Then the cut one-quarter inch deep across the fang holes. Then the suction cups. And I knew I had to keep my heart as calm as possible. As swelling crept upward, I'd have to keep making cuts over the worst parts and keep up the sucking. I'd be getting sick and a little worried about death. I'd be sweating. I wouldn't dare move fast; the boys would have to help me from the woods. If I kept my wits collected and didn't make foolish mistakes I'd have a first-rate chance of pulling through.

Thinking such thoughts makes a guy sweat. I shook loose and got into the spirit of the hunt again, moving slowly along the rock ledge, eyes and ears open.

Charley LaBar picked up the seventh rattlesnake and Jake Kintz the eighth. Jake saw the ninth and it slipped under a boulder. This brought on the narrowest escape of the hunt.

Charley LaBar was born into the wilds of the Poconos, and his grandfather, living at 89, and his father, have been professional trappers, fishermen and hunter-guides. But with this experience has come a contempt of rattlesnakes. Charley didn't bother to hunt a wedge to dislodge the snake. He grabbed the rock with his hands. He lifted and then looked under.

My eyes followed his. And I shuddered when I saw the rattlesnake's head a foot from Charley's fingers! He dropped the rock. Turned, with a quick laugh.

"That isn't good," he said. He watched Jake Kintz nudging the snake into the open and nabbing him.

(Continued on Page 30)

"There was no bridge, and the rattlesnake den lay across Big Bushkill Creek."



THE GAME VISUAL

MOTION PICTURES

Motion pictures in the Game Commission's various film libraries are available *only* when it is possible for some representative of the Commission to present them or be present when they are shown. They are not available for use outside the Commonwealth. Requests for motion picture programs should be made well in advance of the desired date for showing. Due to very heavy bookings of films it may not be possible to fill requests for specific films; in such cases every effort is made to schedule alternate pictures. All requests for film service should be made to the Field Division Supervisor having jurisdiction over your county. A list of these Supervisors is contained in the Commission Directory printed inside the front cover of this magazine. The Harrisburg headquarters office does *not* maintain a film lending library.

The following list of motion pictures are, with a few exceptions, stocked in every Division office.

"How Birds Feed Their Young"

A 400 foot color silent picture portraying the home life of some common birds and the unusual method by which the young are fed.

"Once Upon A Time"

A 400 foot silent, black and white picture showing the evolution of nature from pre-historic times to the present day, including the over-cutting of our forests, soil erosion, ravages of dust storms, and other misuse of our natural resources.

"Wildfowl In Slow Motion"

A 400 foot reel in color and sound showing wonderful close-ups in slow motion of many species of waterfowl in flight.

"Millpond Memories"

A 400 foot color and sound picture centered around the many forms of wildlife that can be seen by a boy and his dog by the old millpond.

"Snakes"

A 400 foot reel in color and sound depicting many of the poisonous and non-poisonous snakes found in the United States, including visual explanations of their methods of locomotion, skin shedding, etc.

"Camouflage In Nature"

A 400 foot color and sound picture showing the protective coloration and pattern matching of numerous birds, mammals, fish, and insects.

"Pennsylvania Wildlife Wonders"

A 1200 foot color and sound reel of the most interesting natural history subjects including the life history of the woodcock, the beaver, many game and song birds, mice and insects, and an awe-inspiring climax showing the transition in slow motion of the larvae to the Monarch butterfly.

"Wings Skyward"

A silent color picture, 1200 feet in length, presenting a "birds-eye" view of the famous Pymatuning Waterfowl Sanctuary near Linesville. The film shows many of the ducks and geese which utilize the refuge and includes some of the management practices used to attract them.

"Pennsylvania Birdlife"

A 1600 foot silent color picture depicting nearly all of Pennsylvania's common song and insectivorous birds as well as some of the State's rarer feathered visitors.

"Wildlife Problems"

A 1200 foot silent reel in color portraying the live trapping and transferring of game, especially bears, beavers and rabbits and including high action sequences on small game hunting.

"Clean Waters"

An 800 foot sound and color film on water pollution, its causes and cures. This is an excellent picture showing the results of stream pollution on human and wildlife and modern methods of water purification.

"A Heritage We Guard"

A 1600 foot black and white, sound picture showing the early day trapping industry, Indians, and the wilderness which confronted pioneer settlers. The history of our use of natural resources is depicted with the final scenes devoted to things which must be done to improve crop and wildlife yields.

"For Years To Come"

A U. S. Soil Conservation Service film containing 800 feet in color and sound. The picture depicts life on the farm during all four seasons of the year. Taken on a York County farm where the landowner is profiting by having adopted modern agricultural methods to improve crop and wildlife yields.

"Wildlife In The Farm Program"

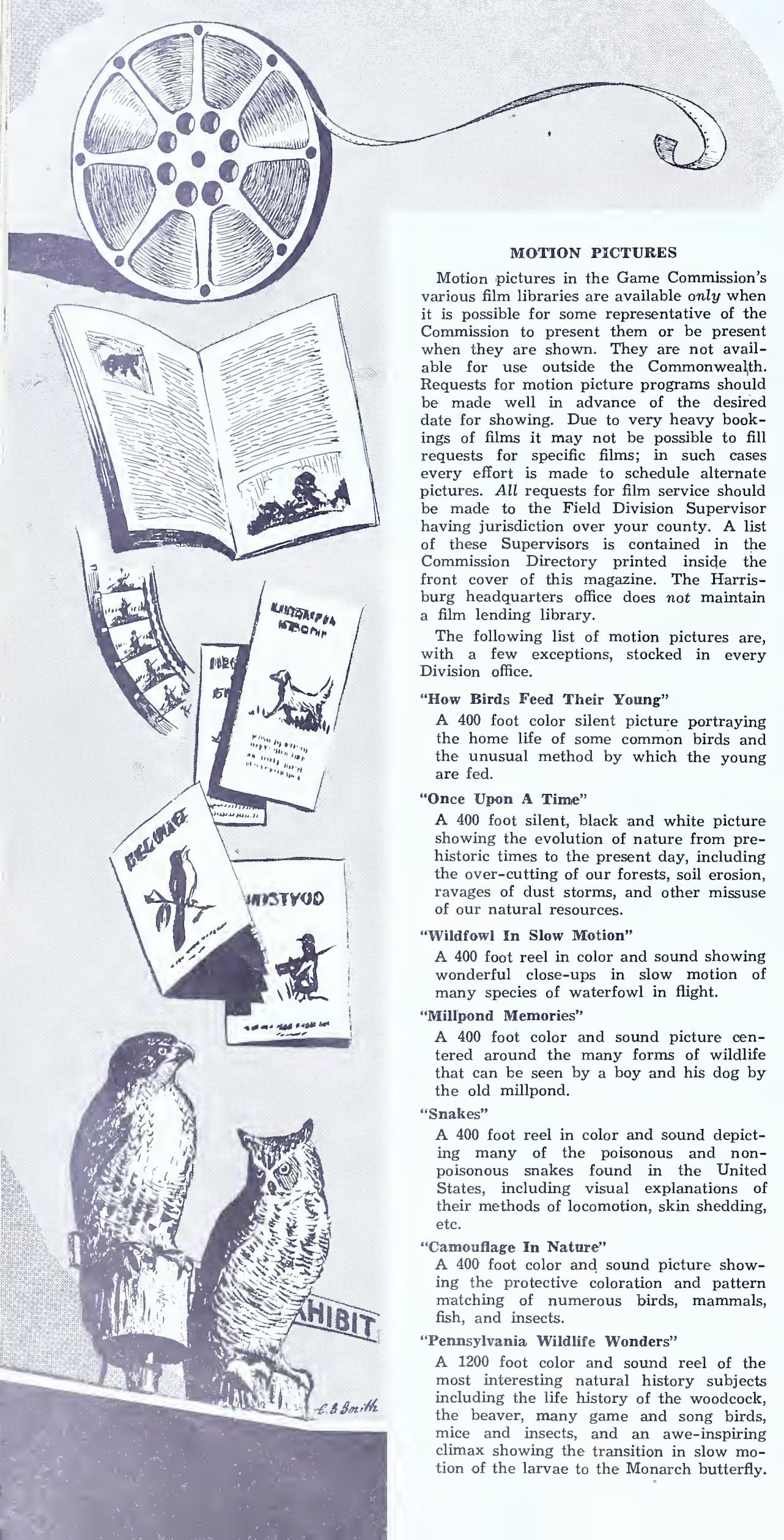
An 800 foot color and sound film portraying Pennsylvania's famous Cooperative Farm-Game Program. The picture features safe gun handling, courtesy to the landowner and portrays modern methods employed by farmer to improve crops and wildlife. A pheasant hunt highlights the activity throughout the reel.

"Wildcat Hunt"

A silent 400 foot color picture showing the thrilling chase and live capture of a Pennsylvania wildcat. The cunning of the cat and the agility with which it protects itself against three dogs when finally brought to bay is highly exciting.

"Work and Play"

A silent, color film, 800 feet in length, showing sportsmen's recreational activities including picnics, field days, field trials, bench shows, trap shoots, game bird propagation, farmer-sportsmen relations, etc.



COMMISSION'S AIDS

PUBLICATIONS

Publications may be ordered from the Pennsylvania Game Commission, Harrisburg, Pa., or from any of the Field Division Offices. Remittance should be in the form of Money Order or Check made payable to the Pennsylvania Game Commission. **DO NOT SEND STAMPS.** Cash forwarded at sender's risk.

PAID PUBLICATIONS

"Pennsylvania Game News"

A monthly publication containing stories, articles and notes of interest to hunters, trappers, and all those who have an interest in wildlife and the outdoors. Subscription Rates: 1 year—\$1.00; 2 years—\$1.50; 3 years—\$2.00; Club Rate Plan for organized Sportsmen's Clubs, Junior Sportsmen's organizations, or other youth groups—\$.50 per year.

"Pennsylvania Birdlife"

Written and illustrated by Hal H. Harrison, widely known photographer and outdoor writer, this booklet contains 72 beautifully illustrated pages including 80 outstanding photographs by the author, and six color plates depicting 124 species of Pennsylvania birds. It explains the value of birds, how to study them, how to attract and conserve them. Price—\$.50

"Pennsylvania Birds of Prey"

A well written booklet on Pennsylvania's hawks, owls, and eagles containing short word sketches of their field markings and life history as well as detailed information on their food habits. The booklet features four pages of full color bird portraits and many black and white sketches. Price—\$.25

"My Land and Your Land"

Four conservation books for children. Each is written with a special appeal to a particular age group or grade in school. Six years of research by leaders in the conservation education field were devoted to the preparation of the 160 pages of text. Illustrations, both in color and black and white, give life to the text and are found on every page. Price, per set of 4 booklets—\$.50

"Wild Ducks"

A 36 page sportsman's guide to the major waterfowl flyways of North America and the ducks that use them. Sixteen common species are portrayed in full color. Price—\$.25

"The Farmer and Wildlife"

A tremendously valuable bulletin dealing with farm problems and discussing methods of improving the farm for wildlife. Every suggested project is splendidly illustrated. Price—\$.25

"Colored Bird Charts"

Four charts beautifully illustrated by Jacob Bates Abbott, nationally known

wildlife artist. 1. Game Birds—31 game birds found in Pennsylvania; 2. Summer Birds—23 song and insectivorous birds; 3. Winter Birds—26 birds which are either permanent residents or winter visitors; 4. Birds of Prey—13 hawks and owls. Price—\$.50 singly; \$1.50 per set.

FREE PUBLICATIONS

Well What's Wrong? a 8 3/4 x 11 3/4 inch, 32 page bulletin containing 28 full-page nature quiz drawings, five or more to the page, and 4 pages of answers in the back.

Hunting is a Big Business a 4 x 7 1/4 inch pamphlet explaining the economic importance of wildlife and listing the game killed, the licenses sold, the accidents which occurred and the seasons and bag limits from 1915 to date. This little pamphlet will settle many a question raised over the cracker barrel.

How to Trap Furbearing Animals a 4 x 7 1/4 inch pamphlet illustrating and describing methods of making sets to capture foxes, minks, muskrats, etc., and containing tips on practical trapping gear, implements and baits.

Cooperative Farm-Game Program a 4 x 7 1/4 inch pamphlet explaining the cooperative undertaking and citing the benefits to be derived by landowners by affiliating with it.

How to Raise Day-Old Pheasant Chicks a 6 x 9 inch pamphlet explaining the facilities necessary and the methods required to raise day old pheasant chicks to twelve weeks of age under a cooperative program between the Game Commission and interested landowners, sportsmen and others.

An Effective Trio Going Forward Together a 4 x 7 1/4 inch pamphlet citing the responsibilities of the farmer, the sportsman and the Game Commission in the wildlife program and urging cooperation and unity of effort.

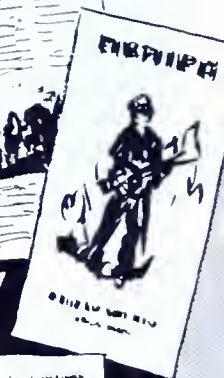
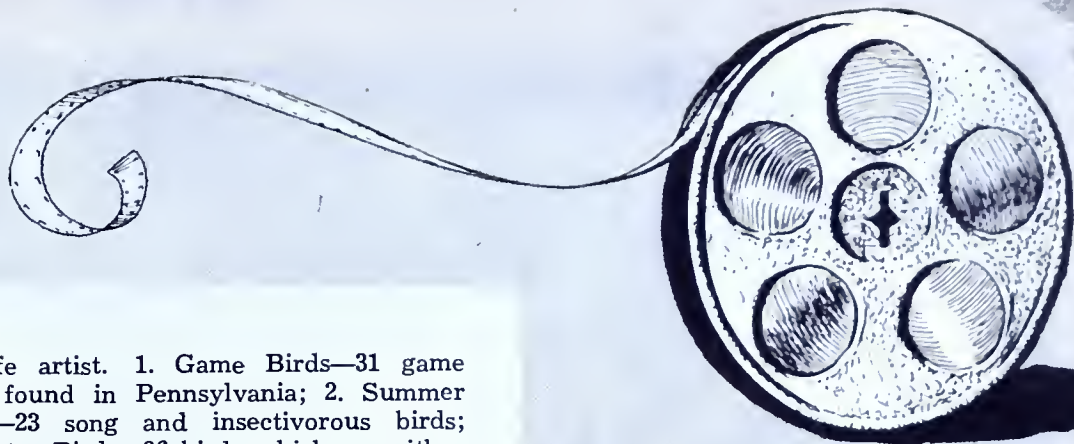
Pennsylvania Game Laws a pocket pamphlet of all the laws affecting wildlife, its management and its protection.

Biennial Report a 6 x 9 inch well illustrated report of every two-year period of activities. Good material for any one interested in conservation education.

EXHIBITS

Under a present Commission policy, wildlife exhibits may be displayed only on four major occasions, namely:

1. The State Farm Show at Harrisburg in January.
2. The Philadelphia Motorboat and Sportsman's Show at Convention Hall, Philadelphia, in March.
3. The Allegheny County Free Fair at South Park, Pittsburgh, in September.
4. The Hershey Park Zoo during the summer months. (Mounted specimens only.)





OUTDOOR KIDS

By HAL. H. HARRISON

THE children felt very proud of themselves.

They had found a mystery and they had solved it. The adventure occurred while they were spending a vacation with their parents in Cook Forest State Park. They lived in a log cabin along the Clarion River and the cabin was surrounded by a small yard. Similar cabins lined the banks of the river.

After dark, the first evening, a crash and a clatter occurred in the yard. Everybody ran outside. Flashlights were played over the yard and around the cabin. Nothing was disturbed except that the garbage can lid was thrown several feet from the garbage can. That had made the noise. Something was raiding the garbage can.

Everybody went inside again.

"Let's wait here by the door," Jane suggested, "and if the thing comes again, we'll rush right out with our lights."

Billy was agreed and they waited for almost an hour. Nothing happened. The thing did not return.

The next evening, the children were caught by surprise when the crash occurred again in the yard. By the time



they had found the flashlights and rushed outside, the thing had heard them coming and had disappeared. The garbage can lid was again thrown clear of the can.

The next afternoon, the children made preparations to solve the mystery. They decided to try to take a picture of the thing just after it threw the lid to the ground.

Billy had received a little camera equipped with a socket for a flashbulb as a Christmas gift from his father. The children decided that if they could take a flash picture of the garbage can just after the crash occurred, they might be able to see what was creating the disturbance.

A kitchen stool served as a tripod for the box camera. This elevated the camera enough to place it level with the

(Continued on Page 31)

STREAMLINING OUR FIELD ORGANIZATION

IN THE July GAME NEWS the story was told of the realignment of field divisions and districts, at a substantial saving to the Game Fund. Detailed announcements of this streamlining of the field organization have been made throughout the State. All sportsmen and other citizens should learn the name and address of their Game Protector and his territory just as soon as possible, so that mutual cooperation may be maintained on the highest level.

Pennsylvania Game Protectors are front-line men in the cause of wildlife conservation. In order to conduct the field work efficiently and establish a definite line of authority, each of the six Wildlife Conservation Divisions has a supervisor in charge.

Wildlife Conservation Division Supervisor

A supervisor is selected for his qualifications as a leader of men, his personality and ability to get along with people, his record as a field officer over a period of years and his knowledge of the many phases of the Commission's work. On the inside of the front cover of this magazine, names, addresses and telephone numbers of the Division Supervisors are listed as well as the counties under the jurisdiction of each. There are from ten to thirteen counties in each division. The supervisor is responsible for all field activities within his Division.

Land Utilization Assistant

To carry on effectively his various wildlife division activities on a divisional basis it is necessary for him to have assistants and advisors. Land utilization is one of the major field activities and this work covers:

1. Information and recommendations concerning the purchase of game lands and the leasing of private lands.
2. The development of lands purchased or leased for game management purposes to assure maximum wildlife crops.
3. Preparation of cover and soil maps and complete management plans for state game lands.
4. Cooperation with private landowners to help develop better game management and soil conservation practices on their land.
5. Forest fire protection, prevention of soil erosion, planting seedling trees, shrubs, vines and grains and other comparable practices.
6. Sale of forestry products from state game lands, thus creating more favorable wildlife environment.
7. Establishment and maintenance of property and refuge lines, roads, fire trails, buildings, etc.

It can, therefore, readily be determined that the position of Land Utilization Assistant requires the services of a man properly trained along these particular lines or one who has shown special aptitude and ability in these activities.

Wildlife Protection Assistant

The Wildlife Protection Assistant is really a general field assistant. He helps guide the

Game Protectors in their law enforcement problems, special investigations, game trapping, restocking, winter feeding, and other general duties. On assignment he takes charge of the Division's general administrative functions during extended absences of the Supervisor. It is his duty to help instruct the Deputy Game Protectors and to keep the Supervisors informed of personnel problems within the Division.

Conservation Education Assistant

The matter of preventing violations through conservation education for the youngster up to the old-time hunter is very essential in the field. It is necessary to carry out the public relations and educational programs of the Commission and these responsibilities are centered in the Conservation Education Assistant. These programs concern our purposes, policies, and wildlife restoration methods and needs within the Division. This Assistant also addresses sportsmen's meetings, school and other assemblies, and shows motion pictures. He attends field events sponsored by sportsmen's organizations and assists sportmen and civic organizations to plan projects and programs bene-

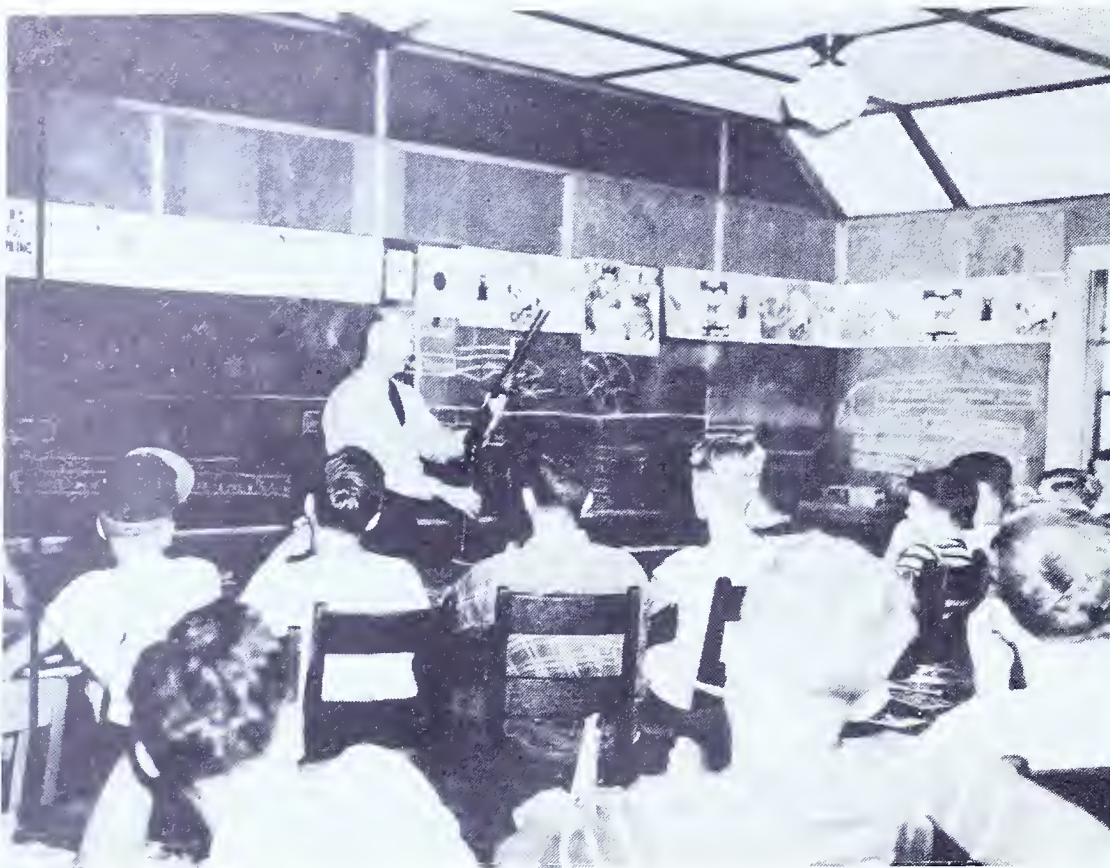
ficial to wildlife. It is also his duty to develop and promote predator control campaigns within the Division and as a part of this program he is expected to instruct the sportsmen and the officers of the Division in the most successful predator control methods and devices.

Head and Senior Stenographer-Clerk

Since all phases of field activities are handled through the Supervisor's office, it is necessary for the Head Stenographer-Clerk to be familiar with at least the most common Game Laws, the hunting seasons, bag limits, land purchase and utilization methods, the Farm-Game Program, the issuance of special permits, and the game trapping, feeding, distribution and other programs. This young lady establishes and maintains Divisional Office files and records of various kinds. It is essential that she have a pleasing personality to meet the public graciously and be courteous in answering telephone calls. The Game Commission is especially fortunate in having high-type young ladies fill these positions in the six Division Offices. Some of them have served ten or more years. They are really the "right hand" of the Supervisor and his assistants.

A District Game Protector is responsible for the maintenance and development of areas





The matter of preventing violations through conservation education is very essential in the field. Here a Game Protector instructs a group of junior sportsmen in the safe handling of firearms.

District Game Protectors

If one were comparing different parts of our organization with the different parts of an automobile, the Game Protectors would constitute the motor. They are the power that actually turns the wheels and keeps the car in motion, because they are responsible for all field activities of their geographical districts excepting research and the game farms. The State has been divided into 149 Game Protector districts. Each district comprises approximately 300 square miles in area.

A person becomes a Pennsylvania Game Protector only after he is graduated from the Ross Leffler School of Conservation. A one-year course of instruction is given the students who are selected through competitive examinations. When one considers the multiple duties of a field officer of the Commission, it is no wonder that about twenty-five or more different subjects are taught at the school.

A Game Protector is responsible for the maintenance and development of the State Game Lands within his district which includes the game refuges established thereon. Auxiliary Game Refuges on private lands, Game Propagation Areas, Dog Training Areas, Farm-Game Cooperative Projects and other special areas, all are part of his responsibilities. He submits recommendations to the Land Utilization Assistant for work to be performed on these lands.

A Game Protector enforces the game, fish and forestry laws. This phase of his work consists of patrolling, investigation, apprehension and prosecution of offenders. In prosecuting cases before a Justice of the Peace, Alderman or Magistrate, he must act as the prosecuting attorney, therefore must have a thorough knowledge of the laws and legal procedure.

A Game Protector traps and transfers game, distributes game and feeds wildlife

during times of emergency. He traps and otherwise controls predators. He investigates and adjusts bear damage complaints, advises what to do to prevent deer and other damage to crops, etc., probates bounty claims, tags beaver hides, and at times stops and searches motor vehicles for illegal game. He is a public relations ambassador and is constantly striving through conservation education to prevent violations. He attends and addresses sportsmen's and civic group meetings, school assemblies, church and other

meetings, and explains the Commission's programs to them. He assists with research activities, makes surveys of game conditions, prepares estimates of game killed, investigates hunting accidents, and often supervises lumbering operations on State Game Lands. His paper work and reports require thorough training. He handles his own correspondence, files and records, and prepares payrolls, reports, expense accounts and numbers of other papers. His telephone is a busy line and when away from home on field duty his family takes care of these calls. He selects and trains his Deputy Game Protectors.

A Game Protector's duties are almost without limit. Because of his knowledge of the cabins and the rural and mountainous areas of his districts he frequently plays an important part in solving criminal cases. When a flood occurs his services are always in demand, because he is a uniformed officer, trained in first aid, and in assuming leadership.

Food and Cover Corps

The 1949 Legislature saw fit when the resident hunter's license fee was increased, to earmark the sum of \$1.25 from each one for:

Improving natural food and cover for wildlife; the purchase, planting, etc., of game foods for feeding wildlife; the purchase, trapping and distribution of game; and the protection of property of farm-game co-operators.

The Commission, therefore, has a mandate to fulfill, and the funds to really expand our food and cover program beyond anything even dreamed of a few years ago. The Game Protectors cannot attend to all this work in addition to their many other duties, so a Food and Cover Corps has been established.

(Continued on Page 29)



Land utilization is one of the major field activities, including development of lands purchased or leased for game management purposes to assure maximum wildlife crops.



On the morning of March 30th a deer wandered out on the tippie of a coal company near Lake Lynn. It was startled by the approach of a train of coal cars from the mouth of the mine and, as the cars came closer, the deer was forced to retreat further out on the tippie. Finally, in frightend desperation, the deer leaped into the air and fell about 35 feet, crashing through the roof of a small wooden building below and sustained injuries that caused its death a short while later.—District Game Protector T. W. Meehan, Uniontown.

On a Sunday afternoon in early May I was fishing an abandoned beaver dam at the head of Bakers Run when I flushed a pair of wood ducks and a pair of black ducks. This isn't so amazing but the action of a wood duck drake interested me. As I continued fishing, I worked down behind an old snag. Suddenly I heard the whistle of wings through the air and I automatically forgot my pursuit of trout and glanced around to see what kind of bird had made the sound. It was a wood duck drake and, as it circled over me, I hugged the old snag and watched. The beautiful bird flew to another old snag nearby, lowered his "landing gear," cut his power, and landed on this snag just as any songbird would do. He seemed just as much at home sitting there on this horizontal limb of the old snag as he would swimming around on the pond.—District Game Protector John Gehron.

As I returned home on May 11th, my son told me that the lady next door had found



a nest of rabbits in her garden and had the young in a box on her front porch. I went over to see them and the woman told me that she had uncovered the nest while mowing her lawn. She thought that she might be able to care for them since they were so little. I informed her that it would be much better if they were put back in the nest and left to the care of the mother rabbit. There were 9 rabbits in the litter and on May 16th I checked the nest and found eight of them still alive. Another check on May 17th found them out of the nest. During the past winter under the rabbit trapping program, we caught 5 rabbits in my garden. With the increase noted above, I can see that the traps will be busy again during the next season.—Game Protector Albert J. Kriefski, Lewisburg.

How destructive is this black marauder known as the crow to the wildlife of Pennsylvania? Despite the reading of numerous articles on the subject, I never realized just how destructive the crow can be to ground nesting birds until I visited a Turkey Propagation Area in Diamond Valley, Huntingdon County this spring. In this enclosed area 30 wild turkey hens from the State Game Farm were placed in March. Up until the end of May Game Protector Ross Metz had collected 523 eggs, quite a record. However, this record is dimmed by the fact that the crows took their share of the total egg production to the tune of 123 eggs. This total was obtained by an actual count of shells found in the area and does not include, of course, those that were carried outside the enclosure. On the day I visited the area, one could hear the crows all around the pen giving their boisterous call, just waiting for the hens to lay their eggs. The amazing thing is that, when the hen lays her eggs, she completely conceals her nest with eaves. In spite of this, the crow finds them. It is thought that the crows perch on a nearby tree where they can observe the hen and when she leaves the nest, they immediately swoop down for a feast.—Wildlife Protection Assistant Lester E. Sheaffer, Huntingdon.

On Sunday, May 28th, I was returning from State Game Lands No. 14 and as I was driving down the mountain about 2 p.m.

into Howard Siding, I noticed a group of people excitedly looking over the steep bank. My first thought was that a car had gone over the side of the road, but on investigating, I found that they were watching three little bear cubs that were playing in a small maple tree. We watched the little fellows perform for nearly 45 minutes. The crowd by this time had become much larger and some of the people were right under the tree taking pictures from "ringside." About this time the instinct of Mother Nature and Mother Bear took over the show. Mother Bear peered over a log from a distance of about 35 yards. She looked several times to the left, then to the right, and then took one look at the brave souls under her offspring. That was enough to make a 250 pound ball of Mother Bear prove to a small group of people who were much too curious and certainly much too brave just what a wild mother will do to protect her cubs. The bear headed right for the young cubs and the spectators needed no instruction at all on how to leave the area—and fast! The cubs by this time were already more than half way down the tree. In a few more seconds the mother bear was heard scolding and driving her young down over the hill into the deep woods.—District Game Protector Norm Erickson, Emporium.

On the night of May 20th two hogs weighing about 300 pounds each were killed by a bear. These hogs were in a pen about 300 feet from the Brown Restaurant on Route 322 in the Seven Mountains section. The hog pen was only about 50 feet off the main highway. This is the first time in the 14 years I have been in this District that we have had to pay for damage done by bears.—District Game Protector Sam Reed, State College.

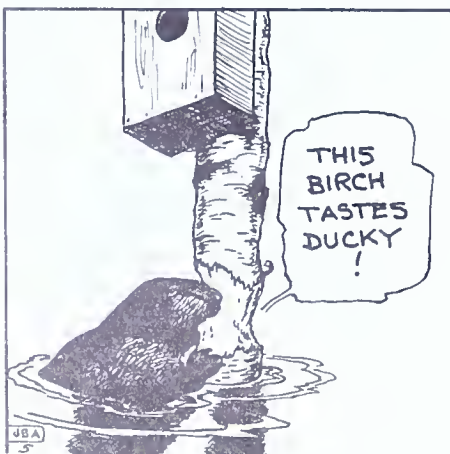
Gene Fritz, a cooperator on Farm Game Project 150 related the following incident to me recently. While out plowing, he observed what he thought was a groundhog in a wheat field. It appeared to have a white spot on its head. Upon closer examination, however, the white spot turned out to be a tin can wedged tightly over the animal's head. The groundhog was quite wobbly and must have been wandering around with his head in the can for several days.—Game Protector E. W. Cox, Meyersdale.





One day during the latter part of May I happened to turn over an old piece of tin roofing on the ground. There lay a brilliantly colored, immature blue tailed skink. This skink is a small lizard and, true to his name, he has a tail of the brightest blue color. Although this creature is not exactly rare, it is so quick and has such wonderful facilities for hiding under grass, etc., that it isn't a common sight to most of us. For this reason I decided to capture it for exhibition purposes. It was not until I got back to headquarters and checked my field book of natural history that I found out that it didn't hurt him half as much as I thought when I pulled his tail off in capturing him. The book explained that the blue tailed skink can and does shed his tail when in great danger. I am now patiently waiting for the little fellow to grow a new tail. The book doesn't say how long this will take.—Game Protector Dean M. Lesnett, Huntingdon.

Right after the past beaver season I erected 27 new wood duck nesting boxes on some of the beaver ponds in my district. They were put up while the ice was still solid by cutting a hole through the ice, taking a post about five inches in diameter, and driving this post down into the mud on the bottom of the pond. The nesting boxes were then fastened to these posts. We did not want to use posts of aspen since that is a preferred beaver food but our only alternative was posts of white birch. We decided that white birch might survive any beaver attacks. On May 13th, while making a wood duck nesting survey on one of these ponds, I noticed that three out of the four boxes which had been erected had capsized and were submerged in the water. I waded out to these and dragged them into shore to examine them. They had been cut off right at the water line, as



neat a job as any beaver could do. Some duck feathers were found inside one of the boxes and a second box contained an even dozen wood duck eggs. Needless to say, we called the beavers a few choice names that day.—Game Protector R. A. Stidd, Benton

One day last winter Mr. Frank C. Ridley, an engineer for the Pennsylvania Department of Highways, was driving south along Route 711 about a mile from Ligonier when he suddenly saw an object dart into view close to the windshield and directly in line with his head. Mr. Ridley crouched down close to the steering wheel and the object hit directly in front of him, leaving a large hole in the shatter-proof glass. Upon examination of his vehicle, Ridley found a hen pheasant between the middle and rear seats. The hen was dead and had left a great amount of glass scattered about the car. The front seat and the man, himself, were covered with fine pieces of glass. Mr. Ridley came into the office to make a report of the accident and to turn the bird over to us. Upon examination, it was found that the feathers were still full of small glass particles while further evidence of glass was found inside the carcass. The bird was buried to remove any possibility of it doing further harm.—Land Utilization Assistant Francis E. Jenkins, Huntingdon.

Deputy Game Protector Edkins, Hills Grove, received a call one day last winter from a man who reported the killing of a great horned owl. When asked for further information about the killing, the man stated that, actually, his aunt had disposed of the bird. She had heard a lot of noise out near her back porch and had gone out to investigate. She found that a "large bird" had killed her cat and was about to make a meal of it. The woman promptly grabbed a club and beat the owl to death.—District Game protector Levi Whippo, Williamsport.

Recently John Lehman, a contractor from Mercersburg, was working on a house near St. Thomas when he and one of his men heard a commotion in a nearby tree. The men watched and soon saw a large grey squirrel throw three smaller squirrels out of a hole in the tree to the ground. The large squirrel then followed the small ones to the ground and appeared to attack them. Next, two other squirrels appeared and attacked the big fellow, finally driving him off after much fighting and squealing. The two men walked toward the scene of battle while it was still raging and this may have helped to drive the largest squirrel off. They found the three small squirrels on the ground and one of them was dead, apparently from bites on the head. The men felt that the large squirrel was a male and the two which finally drove him off were the parents of the three little squirrels. It is common for a strange tom cat to kill the kittens of other cats and I wonder if this could be true in the squirrel family.—Game Protector Edward W. Campbell, Chambersburg.



At about 4:30 a. m. on April 15, we had turned off Route 422 in Buffington Township and were headed toward Little Yellow Creek. About a mile down the road we observed a large bird that seemed to be struggling on the road. We slowed the car down and approached the scene. As the lights cut the darkness, we saw a great horned owl that was trying to take a live rabbit off the road. He had it about a foot off the ground and the rabbit was still struggling. As we got closer, the owl must have become frightened for it dropped its prey and flew off. The rabbit, in turn, ran into the brush, apparently not too badly hurt.—Game Protector Granville Miller, Spangler.

On May 12th while traveling along a Game Lands road, I passed through a section that had been timbered off in recent years. Suddenly a large brown weasel darted in front of the car. He went over the bank on the lower side of the road and disappeared in one of the tops that had been left after the timber operations. I stopped the car, hastily opened the back door, grabbed my .22 rifle from the back seat, went over to the edge of the bank and pumped a cartridge into the chamber. After a few imitations of a mouse's squeak, Mr. Weasel poked his head up over the top of one of the limbs on the felled slash. He was only about 30 feet away and I could see only the top of his head. Below that, I could see about two inches of his body between the limbs. Taking careful but hasty aim, I eased off a shot just as the weasel turned to run. He disappeared and, thinking I had missed him, I began to squeak some more. After a considerable time, I decided to have a look at the limb, since the weasel had not re-appeared. There he lay behind the limb, dead by a fraction of a second.—Game Protector R. A. Stidd, Benton.





COMMISSION SETS GAME, FUR SEASONS AND LIMITS

At its July 6th meeting the Pennsylvania Game Commission decided the game and fur dates for the coming season of September 1, 1950 to August 31, 1951, and the daily and seasonal limits for the taking of game birds and animals and furbearers.

The season for hunting bobwhite quail, Hungarian partridges and ruffed grouse is the same—November 1st to 15th, inclusive. Limits on them are bobwhites, 4 a day and 12 the season; Huns, 2 and 8; grouse, 2 and 6. Ringneck pheasants, cottontail rabbits and gray, black and fox squirrels may be hunted the full season—November 1st through the 25th. The take on them will be: ringnecks, 2 a day and 8 the season; rabbits, 4 and 20; squirrels (combined kinds), 4 and 20.

Only one wild turkey may be taken by a hunter, November 1st to 25th, inclusive. Nine counties and parts of three counties will be closed to turkey hunting. In twenty-four bear counties the turkey season will be closed during the one-week bear season, but open before and after it.

Hares (snowshoe rabbits) may be taken December 25th to January 1, 1951, inclusive. The bag allowed is 2 a day, 6 the season.

Raccoons may be taken, by either the hunting or trapping method, October 16th to February 1st, inclusive. 'Coons may be taken by individual hunters or hunting parties 5 a day. While there is no daily limit for trapped 'coons, a season limit of 40 includes both hunting and trapping.

Woodchucks may be taken 5 a day this year between July 1st and September 30th, inclusive; next year July 2nd to September 30th, inclusive. The season bag on "chucks" is unlimited.

Grackles remain unprotected, but they may not be hunted in October. Red squirrels may be taken in unlimited numbers except during October.

This year, antlerless deer hunting only will be permitted, November 27-28, the first two days of deer season. The opening hour on November 27th will be 9:00 a.m., not 7:00 a.m. as in recent years. The "buck season" for male deer with two or more points to one antler, will run November 29th to December 9th, inclusive. In the 1950

Pennsylvania Official 1950 Open Seasons and Bag Limits

(Federal Regulations on Waterfowl and Other Migratory Game Birds may be Secured from License Issuing Agents or Game Commission, when Available.)

Open season includes all dates listed, Sundays excepted for game. On November 1 and November 27 no hunting of any kind before 9 a. m. Except November 1 and November 27, shooting hours daily are 7 a. m. to 5 p. m. but from July 1 to September 30 inclusive, 6 a. m. to 7:30 p. m. (All shooting hours based on Eastern Standard Time.)

UPLAND GAME (Small Game Possession Limit Two Days' Bag After First Day)	Bag Limits		Open Seasons	
	Day	Season	First Day	Last Day
Quail, Bobwhite	4	12	Nov. 1	Nov. 15
Hungarian Partridges	2	8	Nov. 1	Nov. 15
Ruffed Grouse	2	6	Nov. 1	Nov. 15
Wild Turkeys (See counties closed and those with restricted season below)*	1	1	Nov. 1	Nov. 25
Ringneck Pheasants, males only	2	8	Nov. 1	Nov. 25
Rabbits, Cottontail	4	20	Nov. 1	Nov. 25
Squirrels, Gray, Black & Fox (combined kinds)	4	20	Nov. 1	Nov. 25
Squirrels, Red (closed October only)	Unlimited		All months except Oct.	
Hares (Snowshoe Rabbits)	2	6	Dec. 25	Jan. 1, 1951
Raccoons, by individual or hunting party*	5		Oct. 16	Feb. 1, 1951
Raccoons, by trapping*		40	Oct. 16	Feb. 1, 1951
Woodchucks (Groundhogs)	5	Unlimited	1950: July 1-Sept. 30 1951: July 2-Sept. 29	
Grackles (closed October only)	Unlimited		All months except Oct.	
Bears, over one year old, by individual	1	1	Nov. 13	Nov. 18
Bears, as above, by hunting party of three or more..	2	2	Nov. 13	Nov. 18
Deer, Antlerless (See Note)* by individual	1	1	Nov. 27	Nov. 28
Deer, male with two or more points to one antler (See Note)*, by individual	1	1	Nov. 29	Dec. 9
NO OPEN SEASON—(Hen Pheasants, Cub Bears, Elk and Spike Bucks)				
FURBEARERS				
Skunks	Unlimited		Unprotected Sept. 1, 1950 to Sept. 1, 1951	
Opssums	Unlimited		Unprotected to Sept. 1, 1951	
Minks	Unlimited		Nov. 6	Dec. 16
Otters	Unlimited		Nov. 6	Dec. 16
Beavers (traps only), State-wide*	2	2	Feb. 15, 1951	Mar. 1, 1951
Muskrats			NO OPEN SEASON	

*SPECIAL REGULATIONS

Turkeys, Counties Closed—Adams; Armstrong; that part of Cambria west of Highway Routes 271 and 56; that part of Cumberland south of U. S. Highway Route No. 11 to the west shore of the Susquehanna River; Fayette; that part of Franklin south and east of U. S. Highway Route No. 11; Greene; Mercer; Somerset; Venango; Westmoreland and York have no open season.

Turkeys, Restricted Season—Bradford; Cameron; Carbon; Centre; Clarion; Clearfield; Clinton; Elk; Forest; Jefferson; Lackawanna; Luzerne; Lycoming; McKean; Monroe; Pike; Potter; Sullivan; Susquehanna; Tioga; Union; Warren; Wayne; and Wyoming. **OPEN SEASON**—Nov. 1-12 inclusive; **CLOSED DURING BEAR SEASON**—Nov. 13-18 inclusive; **OPEN SEASON**—Nov. 19-25 inclusive.

Raccoons—Hunting season begins at 7 a. m. on the first day, and ends at Noon on last day (see instructions below concerning trapping). May be hunted day or night, Sundays excepted. The season limit applies to hunting and trapping combined.

Deer—Antlerless Deer may be taken only Nov. 27 and Nov. 28, State-wide, without special permits. Season may be closed in any County under Act 221 of 1949. (Newspapers will announce closed counties, if any.) This year a hunter may kill either one antlerless deer or one legal antlered deer—not both—within the periods prescribed, whether hunting individually or with a camp or hunting party.

Beavers—No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to the Game Protector in District or County where trapped.

Trapping—Traps for furbearers and raccoons not to be placed, staked or set before 7 a. m. on the first day of the open seasons. The season on the last date indicated for Trapping closes at 12 o'clock Noon on last day. Traps must be tagged with metal name tags.

Snares—The use of snares is prohibited in all counties except by special permit.

REGULATIONS FOR UPLAND GAME FIXED BY PENNA. GAME COMMISSION
AT MEETING JULY 6, 1950.

1950 HUNTING LICENSE IS VALID SEPT. 1, 1950 TO AUG. 31, 1951, BOTH DATES INCLUSIVE.

(Continued on next Page)

season, a hunter may kill either one antlerless deer or one legal antlered deer, (but not both) within the periods prescribed, whether he hunts individually or with a camp or hunting party.

The season on bears is November 13th to 18th, inclusive. Bruins over one year old may be taken by individuals, one a day and one the season; by hunting parties of three or more, 2 a day and 2 the season.

There will be no open season on hen pheasants, cub bears and elk.

The muskrat season will be closed during the entire 1950-51 license year. Beavers may be taken, 2 a day and 2 the season, February 15th to March 1, 1951, inclusive, in all counties of the Commonwealth, though certain beaver dams will be closed and posted against the taking of "flat tails" wherever the Executive Director deems it advisable to protect brood stock. Unlimited numbers of minks and otters may be taken November 6th through December 16th this year. The Commission placed skunks and opossums on the unprotected list until September 1, 1951.

Game in Deep Freezes May Bring Penalties

The Pennsylvania Game Law provides that game lawfully taken during the open season may be possessed during the open season therefor and for 60 days thereafter. Any person may obtain a \$1 permit authorizing him to possess the flesh of a lawfully killed bird or animal, or any part thereof, for an additional period not to exceed six months.

Two-way Radio Communication Tests Prove Highly Successful

Exhaustive experimental tests of two-way radio communication conducted in southwestern Pennsylvania and the north-central counties prove beyond doubt its practicability as both an administrative and law enforcement tool, as well as point the way to a new era in operating efficiency. The first official administrative message of the Commission by the two-way radio system was from Executive Director Frye in his official car at Harrisburg to Wildlife Conservation Supervisor M. E. Sherman in his car while driving in the mountains of Clearfield County on June 19, 1950. The message was, "Mr. Sherman, please be at my office Thursday, June 22, at 10:30 A.M. to discuss employee's merit rating system. You may return home that evening." The message was relayed to Mr. Sherman through experimental station KGA608 located near Philipsburg and receipt confirmed to the Executive Director within a matter of seconds.

Director Frye commented: "This marks a new milestone in the steady progress of achievements by the Pennsylvania Game Commission and opens the door to operating efficiency beyond our wildest dreams of a short time ago."

1949 Prosecutions and Penalties Soar

Since the war, outdoor writers across the country have decried the increase in hunter lawlessness. Columnists have become careful about applying the term "sportsmen" to all nimrods. The ugly terms, "gun goon," "thief," "poacher," and "human predator" appear in their writings to show that all hunters are not sportsmen.

While this Commonwealth has its share of true sportsmen, it has its share, also, of hunters who apply the term to themselves all too loosely. Bearing out this point, the Pennsylvania Game Commission compiled the following figures dealing with 1949 game law prosecutions and penalties: Total prosecutions, 5,838; total penalties collected, \$190,386.35; average penalty amount, \$32.61.

Game School Trainees Learn Red Cross Methods

Two instructors from the DuBois Chapter of the American Red Cross appear one night weekly at the Ross Leffler School of Conservation near Brockway to teach first aid to 25 prospective game protectors now in training there.

In the words of one Red Cross official: "These first aid skills will be valuable to the men as game protectors and will give added protection to Pennsylvania motorists, woodsmen, farmers, and hunters. A game protector, in his line of duty, travels more than a thousand miles per month on the highway. He carries on his conservation work in forests and with farmers far from medical facilities. Also, he is in the thick of every hunting season where his Red Cross First Aid know-how may save the lives of hunters."

SUMMARY STATEMENT OF BOUNTIES PAID ON PREDATORS DURING FISCAL YEAR, JUNE 1, 1949—MAY 31, 1950

Counties	Weasels	Gray Foxes	Red Foxes	Goshawks	Great-Horned Owls	Amount
Adams	158	61	10	..	.....	\$ 442.00
Allegheny	153	196	50	..	1	1,142.00
Armstrong	410	387	20	..	37* (2)	2,216.00
Beaver	29	165	18	..	11	815.00
Bedford	299	229	19	..	22	1,399.00
Berks	618	479	7	..	17	2,643.00
Blair	189	106	30	..	17	815.00
Bradford	373	440	39	1	115	2,851.00
Bucks	345	255	18	..	13* (2)	1,495.00
Butler	538	362	16	..	2* (2)	2,178.00
Cambria	683	193	1	2	13	1,532.00
Cameron	4	107	8	..	3	479.00
Carbon	291	168	.....	..	9	1,007.00
Centre	222	348	21	..	44	1,911.00
Chester	207	.....	.....	..	2	216.00
Clarion	482	336	27	..	45	2,155.00
Clearfield	502	382	10	3	21	2,203.00
Clinton	53	299	13	1	10	1,355.00
Columbia	539	296	4	2	53* (1)	1,992.50
Crawford	754	119	41	..	151* (6)	2,125.00
Cumberland	145	96	30	..	7	684.00
Dauphin	403	215	6	1	21* (1)	1,393.50
Delaware	45	.....	.....	..	.....	45.00
Elk	177	215	27	..	10	1,195.00
Erie	537	44	44	..	73* (4)	1,237.00
Fayette	243	252	40	..	3	1,426.00
Forest	83	64	3	1	11	405.00
Franklin	119	160	43	..	3	946.00
Fulton	84	157	17	..	32	938.00
Greene	24	163	93	..	90	1,491.00
Huntingdon	173	415	35	2	21	2,099.00
Indiana	614	811	3	..	62	4,168.00
Jefferson	389	389	11	4	43* (2)	2,210.00
Juniata	92	58	15	2	40	588.00
Lackawanna	148	162	5	..	14* (2)	880.00
Lancaster	520	655	18	4	13	3,297.00
Lawrence	117	104	15	..	8	633.00
Lebanon	118	93	2	..	18	587.00
Lehigh	148	227	2	..	4	1,083.00
Luzerne	1,703	486	15	2	50* (1)	3,962.50
Lycoming	191	500	53	1	90	2,844.00
McKean	190	192	48	1	57	1,431.00
Mercer	377	150	35	..	53* (5)	1,361.50
Mifflin	112	192	12	1	9	974.00
Monroe	118	266	12	2	17	1,325.00
Montgomery	237	180	2	2	5	1,000.00
Montour	61	45	.....	..	9	285.00
Northampton	120	110	2	..	4	588.00
Northumberland	318	141	5	1	20* (2)	998.00
Perry	152	105	3	1	17	671.00
Philadelphia	10	6	.....	..	.....	34.00
Pike	28	311	2	..	22* (2)	1,385.00
Potter	102	139	38	2	36* (2)	990.00
Schuylkill	1,063	307	2	..	44* (3)	2,507.50
Snyder	213	27	11	..	18	454.00
Somerset	1,015	298	23	..	28* (2)	2,429.00
Sullivan	161	160	3	3	24* (2)	943.00
Susquehanna	84	262	14	..	49	1,425.00
Tioga	117	192	91	2	101	1,747.00
Union	148	56	15	..	24	551.00
Venango	568	304	7	..	15	1,885.00
Warren	213	116	17	1	65* (3)	1,058.50
Washington	104	436	89	..	8	2,244.00
Wayne	76	477	4	2	32	2,162.00
Westmoreland	882	593	16	..	24	3,436.00
Wyoming	150	162	3	..	19	902.00
York	450	435	31	..	15	2,385.00
Total	19,991	15,856	1,314	44	1,912*	\$98,255.00

Number of Claims—15,792

* 44 fledglings @ \$2.50

Total previous fiscal year 20,263 17,770 17,561 23 1,836 \$168,841.00

Number of Claims—19,650



Pioneer Sportsmen Club

The Pioneer Sportsmen Club of Carbondale has just completed a membership drive which added 925 new members to its rolls. The club has its own range equipped with two remote controlled traps and trap houses as well as a canteen building, all within walking distance of the city. Headed by President John McAndrew, Vice-Presidents Frank Plevyak, Paul Swan, and Henry Anderson, Secretary G. W. Fowler, and Treasurer Robert Dietz, this club is now negotiating for a Dog Training Area of about 250 acres adjoining the trap field.

Broad Top Sportsmen

The Broad Top Sportsmen were hosts to area sportsmen recently at a special meeting, held in their regular meeting place, Miners Hall, in Defiance. The meeting was featured by movies and other special entertainment. Principal speaker was Arthur Logue, Huntingdon, Supervisor of the Commission's South Central Division. This Association was organized in January, 1948, and to date has expended \$1,896.75 in a restocking program of rabbits and ringneck pheasants. Officers of the club include President Marshall Rankin, Charles Foore, Edward Fox, Elza Barton, Vaughn Tenley, and Lovell Fulton.

Lebanon County Chapter IWLA

Spring programs of the very active "Ikes" of Lebanon County included the arrangement for the planting of 10 acres of corn on an area farm, arrangements with the Lebanon County Production and Marketing Administration officials for lime and rye grass which will be planted as winter cover this fall. Fourteen Lebanon High School students, members of the Junior organization, planted 3,500 forest tree seedlings, purchased by the Chapter, in late April. An additional 5,000 seedlings and cover plants were made available for planting by Boy Scouts. The work was supervised by William Wargo, Junior Organization Adviser, Scout Executive Scott Burgoon, District Forester S. L. Kurtz, and William E. Yoder. To date, six acres have been planted by the Junior Organization and Boy Scouts.

York Chapter, Izaak Walton League

June marked the seventh year of publication of *Waltonian News*, monthly newsletter published by the York Chapter of the Izaak Walton League. This progressive group of "Ikes" recently sponsored a Memorial Day fishing contest for over 1,000 county youngsters, started a twice monthly trap shooting program, plans for early erection of a new trap shooters lodge and junior club house on the club farm, "Waltonian Acres," and is continuing its unique outdoor drive-in theater featuring sports and conservation films.

Selinsgrove Sportsmen's Club

According to John E. Boyer, Secretary of the re-activated Selinsgrove or East End Sportsmen's Club, Snyder County is in for a vigorous wildlife conservation program. He gives the following list of activities that this club has participated in or sponsored: representation at the last Federation meeting, assistance in stocking local streams with trout this spring, start of a junior enrollment, fox hunts, rabbit drives, aid in stocking 447 ringnecks and 10 wild turkeys, construction of a pheasant rearing pen with a holding capacity of 3,000 ringnecks, establishment of a new rifle range, and a spring banquet. This club has increased its membership from near the zero point to 240 members.

Huntingdon County Game, Fish and Forestry Association

The Huntingdon County Association played host to the Pennsylvania State Skeet Championship shoot in mid-July. The big "scatter-gun" affair was held at the Association's experimental and recreation farm, "Shenecoy Field." The shoot committee was headed by Walter M. Thomas, assisted by Harold Corbin. The farm, located in Walker Township, provides a year 'round dog training area, crop raising acreage for winter feed purposes, brooding and rearing pens for quail and picnic grounds. Officers of the club are President, Herman Grubb; Ellsworth Quinn, Secretary; James Port, Vice-President, and Howard Shilling, Treasurer.



Conservation-minded sportsmen in Northeastern Lancaster County—700 of them—have set their sights on building up the county's fish and game population. Included in their many projects is a unique predator control program under which the club finances bounty payments of \$1.00 on foxes and \$.50 on weasels. Shown here are William Hehnly, Robert Treisch, and John Hollendach, all of Denver who collected these payments on the foxes shown. The Cocalico Sportsmen's Association, Denver, finances the project.



NOW IS THE TIME

By ED SHEARER

THE MONTH of August can mean many things to the outdoorsman. Fishing in this hot and generally humid month may be a bit on the dull side. The field dog after its accumulation of easy summer livin' lazes from shade to shade as the sun rises and declines. But with it all, there is a warning that summer is flying by and there are many things to be done unless disappointment and frustration be your lot later on. The time when the frosts will herald the dawn of a new season will be here too soon.

Now is the time to check your guns for needed repairs. This is the last chance for any guns that need factory attention. Remember that factories are now running full blast turning out guns and ammunition for a new hunting season. Their repair departments have a large capacity but, even at that, they can only accomplish so much in a given amount of time. Remember, too, that time is shortened by the periods when your gun is in transit from or to the factory.

If you plan to have your work done by a private gunsmith, now is the time to check and be sure he is competent. I have seen some horrible examples from some of the ex-garage mechanics masquerading as gunsmiths. You will find, too, that reliable gunsmiths are plenty busy at this time of year and are wary of predicting exact delivery dates. Parts are still scarce in some cases and in others are practically non-existent. This necessitates hand work which is time consuming and expensive. So take time by the forelock and have repairs done now.

Another important thing to check in this humid month is rust. It is an indisputable fact that many more guns are ruined by rust than are worn out by shooting. The advent of non-corrosive primers has done wonders in reducing the corrosion problem but it is still not safe to set guns away for long periods of time without adequate protection. Likewise, nitro solvents and light oils are unsatisfactory preservatives for any length of time. They run and evaporate, leaving the bore in an unprotected state which probably will result in a fine case of rust when you least expect it.

A good many hunters are familiar with rust but few are familiar with the factors that cause it. A few words on the proper cleaning and care of the gun may be of help. You will need a good cleaning rod and a good brass brush to fit the bore. Add to these some flannel patches, nitro solvent, a tube of graphite preparation, some light oil, and a tube of heavy gun grease. If you have a shotgun, you will need a shotgun cleaning rod and a brass brush to fit your gauge.

After you have used a high power rifle with non-corrosive primers, the first step is to dip the brush into the nitro solvent and run it through the barrel several times to loosen up the powder residue and metal fouling. Next, run dry patches through the bore until they come out clean. Then oil the bore unless you

(Continued on Page 31)

GUN DOGS IN THE CITY

By HERBERT KENDRICK

WHEN given proper care a gun dog may be kept quite satisfactorily in a small yard of a home in the city without disturbance to the household and neighbors. A few gun dogs are actually housed in town apartments; however a great amount of time and effort is expended for their care. A dog loves to keep his feet on the ground and he can with plenty of room but it is amazing how well satisfied one may be on a small plot of ground, provided he is exercised daily.

It is certain the gunner who loves his dog would prefer to keep his friend near him the year around if it can be done without offending his good neighbors. It is unfair to allow a dog to bark or whine enough to keep people awake at night. As lovable as an animal may be in the daytime, do not expect your friends to call him pet names as he howls throughout the night.

While keeping a dog in the city his health is of first importance, and exercise is the first step. Since automobiles are numerous he cannot run loose, so a wire enclosed run is adequate if your lot will allow it. If you do not have room for a lot, a wire strung between two posts or trees will be satisfactory. Place a ring on the wire that will slide back and forth, fasten a chain to the ring and to the dog's collar, giving him room to lie down anywhere along the line. Place his kennel at the end of the trolley, allowing enough chain for him to go in and turn around in a comfortable manner, but do not let him have enough to go around his house and become tangled.

In the city or country a good wooden barrel makes an excellent kennel for your dog. Cut a hole in one end large enough for the dog to enter, load it with cedar shavings, and in winter nail a burlap flap over the hole to insure his warmth. He will sleep regally in such quarters. Your disturbance problems are half solved if his bed is comfortable and he has had enough exercise during the day.

During the wee small hours of the night a dog finds many excuses for barking. Perhaps there is a prowling cat, a distant dog, or the brightness of the moon, which must be serenaded. Once in awhile he may just be lonely, or want to yap just for the fun of it. Can you blame him too much if he barks to receive your attention? There are a few times when you want him to exercise his vocal cords. The tramp or thief who comes quietly to do harm, a fire, or someone who may be hurt, are good reasons to notify his master that all is not well. However constant barking during the night is an unforgivable nuisance and it is wrong to allow it.

When the dog barks, command "Hush!" and slap him with a folded newspaper. He will not be hurt but the noise of the blow will produce a punished effect. Use the same command every time he barks and he will soon associate the word with this noise and your desire for him to cease it. Consistency pays big dividends in the training of a gun dog.

(Continued on Page 32)





BLACK BATTALIONS— from Page 13

Red-tailed and red-shouldered hawks are similarly harassed by black tormentors, upon whom they occasionally turn and dine. In nesting season kingbirds are the sworn enemies of crows and will invariably drive them from the vicinity of their nests. Other small birds vigorously attack the black marauders, notably grackles and robins.

I have never seen any of the huge crow roosts such as there used to be around Camp Hill, Montgomery County, Pa., Camden County, N. J., and on some of the islands in the Delaware River, where the crow concentration was estimated at from 100,000 to 1,000,000 birds. I did see a flock of what I estimated to be more than 6,000 crows winging in scattered formation across frozen fields to a massed stand of evergreens, just before an early winter dusk, near the Massachusetts coast. It is only along the coast that crows in any numbers would be found in New England in winter. From December to February most of the Yankee crow population winters in the big roosts in Pennsylvania, New Jersey and Maryland. The late Samuel N. Rhoads, one of Pennsylvania's veteran naturalists, observes: "Careful observation and inquiry convinces me that during winter a radial sweep of one hundred miles, described from the city of Philadelphia and touching the cities of New York, Harrisburg and Baltimore, will include in the day time, in its western semicircle, fully two-thirds of the crows inhabiting North America; and at night an equal proportion in its eastern half . . ."

E. R. Kalmbach, writing in 1918 on *The Crow and Its Relation to Man*, gives some estimated figures of crows wintering in various well-known roosts, from Connecticut to Virginia: "270,000 at Woodridge, Va.; more than 200,000 at the 'Arbutus' roosts near Baltimore; 200,000 in New Jersey at each of the roosts at Hainesport, Merchantville, Bridgeboro and Centerton. Roosts containing 100,000 or more crows, east of the Appalachians, are grouped on the lower watersheds of the Potomac, Susquehanna, Delaware, Hudson and Connecticut Rivers . . ."

Crows really elevate their nests, and the "crow's nest" on the foremast of a ship is well named. They usually choose a tree well within the woods, often a small grove of uniformly high trees, sometimes a tree at the edge of the grove or forest. The nest is typically placed in an upright fork, near the top of the tree. Forty-five feet might be the

average height from the ground, although the range is from four feet to 100 feet. Architecturally the nest is a deep, bulky cup of coarse sticks, lined with bark, cow hair, horse hair, sheep's wool, corn husks or weed stalks. The ground color of the eggs varies considerably but may be described as light blue-grey-green. Mr. Burns gives "malachite-chromium or glaucous-green" for the usual Pennsylvania colors. The eggs are variously spotted and blotched with browns and purples. Four or five eggs constitute the average complete set. Seven eggs have been found and clutches of six eggs are not too rare. I have found crows nesting more commonly in pines, spruces, hemlocks and beeches, but the list of known nest-trees is long and includes over 30 deciduous trees, besides the conifers. Dr. William Brinhurst, writing in 1895, describes a crow's nest in Logan Square, Philadelphia, and more recently fish crows have been found nesting in the same city square, bordered by large buildings and transversed daily by thousands of automobiles and pedestrians, by Mr. Richard Miller.

The fish crow, an Atlantic coastal species, occurring from Long Island to Florida, is slightly smaller than the common crow, from which it can easily be distinguished as soon as it speaks. Fish crows have a pronounced nasal, asthmatic twang to their "caws." Ask a State of Mainer to say "because" and you've got the fish crow's crooning technique.

Stories and legends of crows abound in the folk-lore of this country. They turn up, usually in reference to sly cleverness or as agents of ill omen, in Shakespeare and in La Fontaine's fables. One of the most understanding crow stories that I've ever read appeared within the last two years, *Black Wings*, by Joseph Lippincott. Lynn Bogue Hunt contributed to this some of his characteristically fine pen and ink illustrations. Samuel Scoville, Jr., and Walter Pritchard Eaton have written with keen insight on crow habits; and Ernest Thompson Seton's *Silver Spot* would send any crow-hater on the run to join the Audubon Society.

The best portraits of crows that I know of are by Louis Agassiz Fuertes in Eaton's *Birds of New York* and Forbush's *Birds of the New England States*. Winslow Homer's spirited painting of crows mobbing a snowbound red fox has achieved world-wide fame.



WHAT IS A CHICKEN HAWK— from Page 4

cotton rat is abundant. This is to the great benefit of the quail, as the cotton rat is a destroyer of quail eggs.

Smart Fellow or Dolt

Hawks can be at times uncannily smart; at others they can be the most stupid creatures of the wild. A few years ago the Milwaukee Public Museum sent a group of men into northern Wisconsin to photograph the nesting activities of a pair of Goshawks. With the aid of climbing irons, O. J. Gromme, head of the expedition, was climbing a tree near the one that held the nest. The female Goshawk struck Gromme with terrific force, cutting a slice out of his scalp with her talons. After that attack one of the men, when climbing up to the blind, wore a football helmet. The others wrapped burlap around their heads. The hawk had the leather helmet slashed up in a week's time, striking it again and again with open talons. Never once, however, did the bird do this to the men with burlap headgear. Instead the hawk hit them whacking thumps with her talons closed like a first. She knew she would have become ensnared in the burlap if she hit it with open talons.

On the stupid side, nothing can compare with the Goshawk who plummeted down on some pheasants in a wire enclosed yard of a farmer in northern Illinois. When the bird hit the poultry netting that served as a roof he bounced back into the air in a cloud of feathers. Stunned and dazed, he shook himself, and slowly flew away, but he had learned nothing. He repeated the dive four times until he was finally finished off by a well-aimed blast of a 20 gauge.

Irving J. Perkins of Oconomowoc, Wisconsin, is a farmer who knows the value of hawks. His knowledge helps him keep rodents under control. Of a recent experience he says, "We were hauling oat shocks out of a field, and there was a pair of Red-tailed hawks diving on the mice as they scurried for cover when we lifted the shocks. The hawks worked all afternoon. I don't know how many mice they caught, but it was plenty."

Howard Clapp, another Wisconsin farmer, also has respect for hawks and the job they do. "I had located a Marsh hawk's nest in an alfalfa field," he says, "and with field glasses was watching the old birds catch gophers and mice. Once the male was flying rather high with a mouse in his talons. The female flew off the nest and followed about 10 feet below him. The male hawk dropped his prey and the female rolled over in flight and caught it in mid-air. She then righted herself and flew down to the nest with the meal for her young." On Clapp's farms, the men cutting hay always leave an island of grass around their nests.

Both hawks and owls are part of nature's plan to keep wildlife in balance. When a hawk extends his police duties to cover the farmer's poultry flock he's treading on dangerous ground and should be killed. Most hawks, however, spend their lives in the seclusion of the woods and fields far from the farmer's poultry yard. They police the landscape for rats, mice, insects, and other farm pests and for this cooperation with the farmer they deserve his protection.

STREAMLINING OUR FIELD ORGANIZATION—from Page 20

This corps at full strength for the entire State comprises 200 men, or approximately 30 to 35 for each division. These men are generally chosen for their woods or farming experience, or as carpenters, road equipment, bulldozer or farm machinery operators.

Each crew has a certain territory in which to work. The work is done on State Game Lands or leased areas composed principally of farm-game projects. They work under assignment of the Land Utilization Assistant in the Field Division Office. The District Game Protector, of course, checks from time to time on what is being done. He is responsible for reporting the accomplishments obtained in his district.

Many things are being done to improve food and cover, among which are the following:

1. Establishing and maintaining food plots at strategic locations in order to supplement the natural supply of food and cover for wildlife.
2. Sharecropping of tillable areas on a rotation basis. Land properly farmed in-

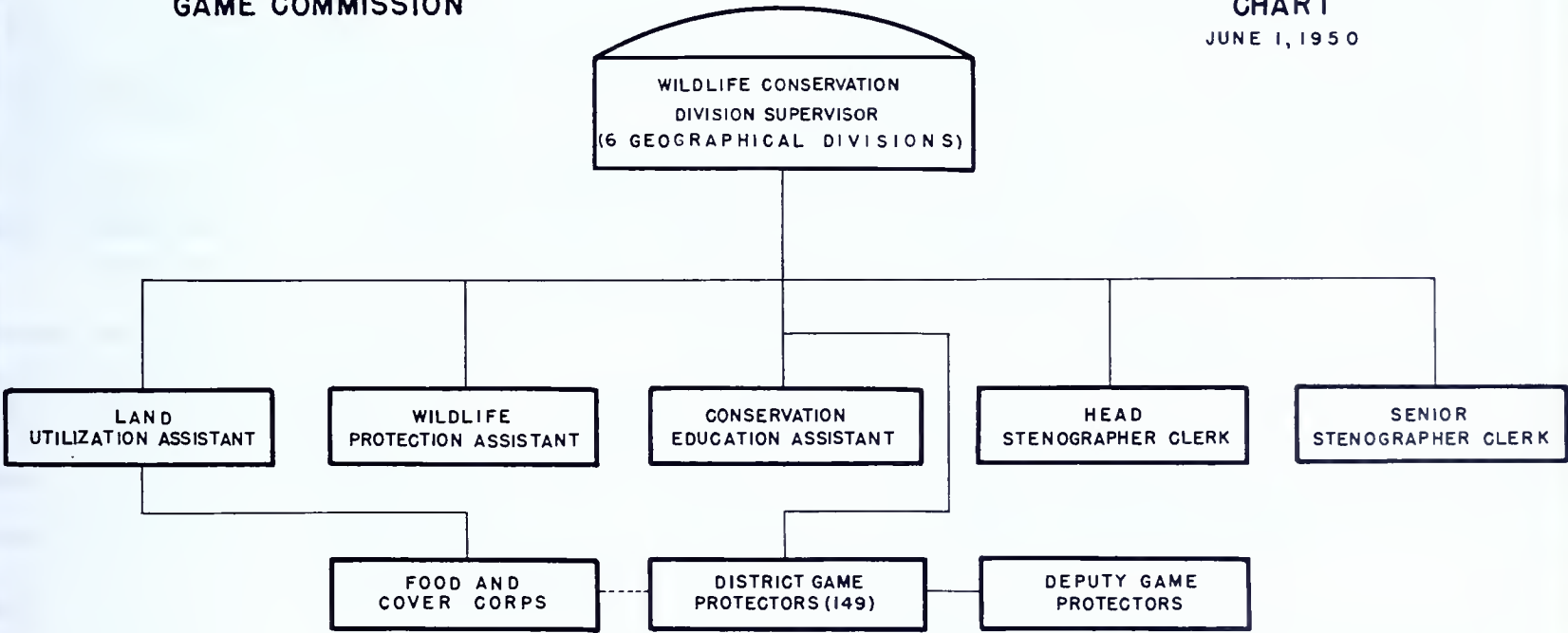
creases in fertility and consequently supports more and better game birds and animals. Share-cropped areas can be maintained more economically than any other management practice.

3. Timber management and cuttings including timber sales, forest thinnings, release cuttings, cuttings to provide deer browse, etc. These are planned to improve environmental conditions for wildlife in the most economical manner contingent with good forestry principles.
4. Trimming apple and other food-bearing trees and grafting to assure a food supply over a longer period of time.
5. Planting seedlings to improve food and cover conditions for game birds and animals. This includes waste spots, hedge rows, stream banks and other locations where food and cover are needed.
6. The improvement of edges between two different types of growth. As an example, between cultivated fields and wood lots or forests.

7. In forested areas with little or no open land, long zigzag strips are established. These are used as food plots or planted to grasses and clovers and the edges are planted to food and cover seedlings and transplants.
8. Transplanting, especially food-bearing plants from locations where they are naturally present in excess, to points where they are needed for proper wildlife environment.
9. Seeding and planting wild waterfowl areas to provide better environmental conditions.
10. Making game feeders and shelters where required.
11. Artificially feeding wildlife species, especially during winter months.
12. Control of predators as other duties permit.
13. Helping to expand and improve farm-game projects and other leased areas.
14. Maintenance of boundary and refuge lines, roads, trails, etc., all of which enhances food and cover conditions.

PENNSYLVANIA
GAME COMMISSION

FIELD ORGANIZATIONAL
CHART
JUNE 1, 1950



Deputy Game Protectors

These volunteer officers perform a great service to the Commission and the sportsmen of Pennsylvania in assisting the salaried Game Protectors with law enforcement and other field activities. A total of 3,000 Deputy Game Protectors has been authorized for the entire State. This means approximately 400 to 500 for each of the six divisions or approximately 20 for each Game Protector. They are selected by examination from applicants located strategically within each district, and are trained by the District Game Protectors. Deputies have the same rights and powers under the Game Law as commissioned Game Protectors. They do not receive any compensation for their services unless specifically employed upon authorization of the Executive Director. Some of them work at times on a per diem basis prior to and during the hunting seasons.

Many Deputies have served twelve, fifteen, twenty, or more years, and they are very valuable assistants. Some of the more experienced Deputies have been supplied with uniform equipment in order to be of greater service. From this group also comes some of the best material for the Conservation School. These men have an opportunity to determine whether or not they would be interested in making game protection and management their life's work after some experience as a deputy.

Deputy Game Protectors are almost without exception a loyal, dependable group of men who receive very little compensation and commendation for the splendid service rendered their State.

Multiply this field divisional group of employees by six and you have a complete picture of the work done throughout Pennsylvania by the personnel who have been trained for their respective tasks in wildlife conservation.

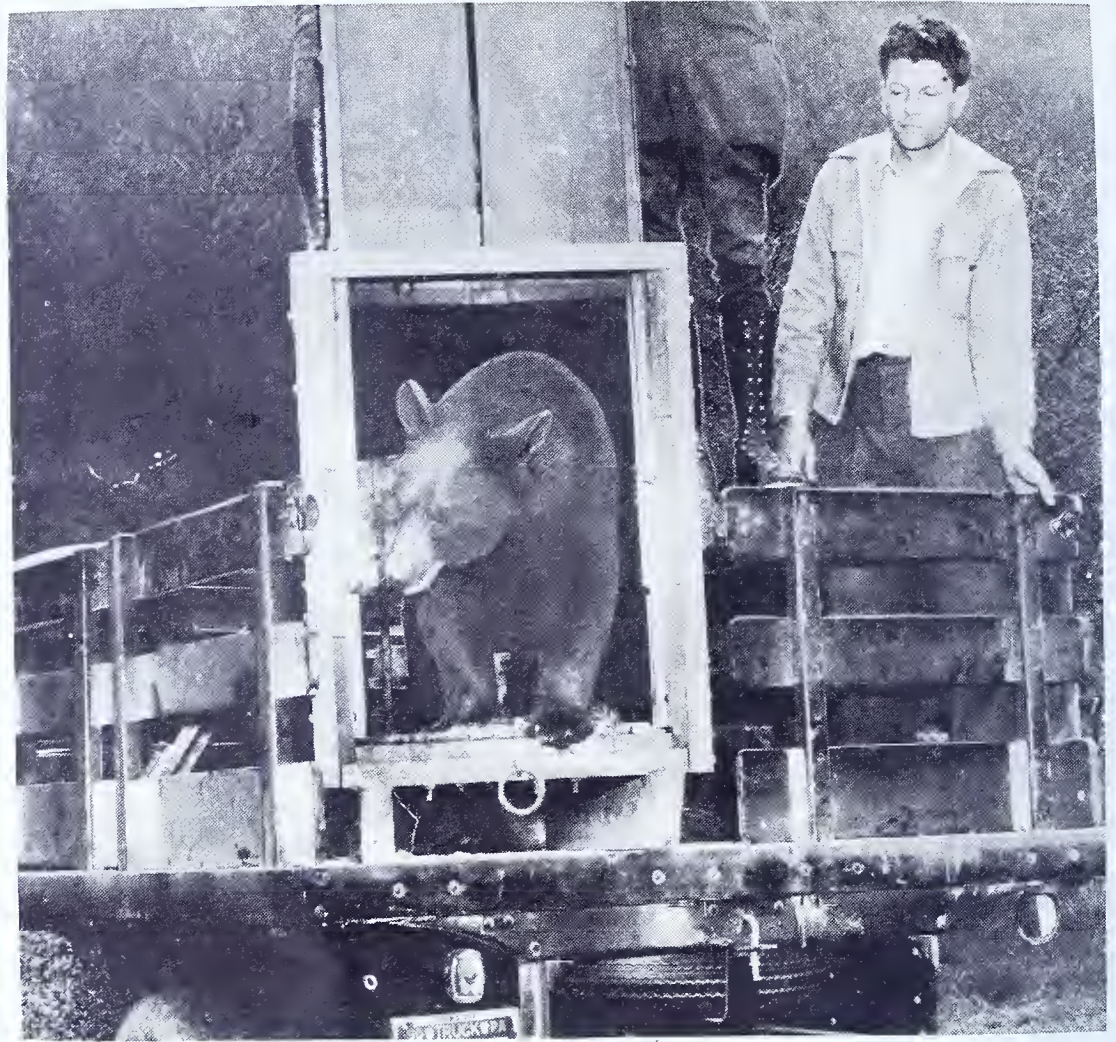
Present Wildlife Conservation Division Office Personnel (Field)

Northwest Division

Temple A. Reynolds, Supervisor
Earl E. Smith, Land Utilization Assistant
William T. Campbell, Wildlife Protection Assistant
Millard M. Crooks, Conservation Education Assistant
Head Stenographer Clerk, Joan M. Plumer
Senior Stenographer Clerk, (Vacancy)

Northcentral Division

M. E. Sherman, Supervisor
Samuel J. Kern, Land Utilization Assistant
LeRoy Gleason, Wildlife Protection Assistant
Richard W. Orr, Conservation Education Assistant



Raup Studio Photo.

The Commission's field force is often called upon to meet unusual and difficult problems. This 275 pound bear caused considerable damage to bee hives this spring in Potter County. Game Protectors succeeded in live-trapping the bad bruin, later releasing him in a more remote section away from any privately owned swarms of bees.

Head Stenographer Clerk, Lois M. Thomas
Senior Stenographer Clerk, Catherine M. Wayland

Northeast Division

C. C. Stainbrook, Supervisor
Earl L. Lorah, Land Utilization Assistant
William Hodge, Wildlife Protection Assistant
Lynn R. Rosenkrans, Conservation Education Assistant
Head Stenographer Clerk, Ludwina D. Runta
Senior Stenographer Clerk, Elizabeth G. Kozokas

Southwest Division

G. L. Norris, Supervisor
N. M. Ruha, Land Utilization Assistant
M. B. Wells, Wildlife Protection Assistant
John S. Shuler, Conservation Education Assistant
Head Stenographer Clerk, Barbara E. Bungalow
Senior Stenographer Clerk, Helen L. Melville

Southcentral Division

Arthur G. Logue, Supervisor
F. E. Jenkins, Land Utilization Assistant
Lester E. Sheaffer, Wildlife Protection Assistant
Jos. S. Chick, Conservation Education Assistant
Head Stenographer Clerk, Alice G. Weaver

Southeast Division

Morris D. Stewart, Supervisor
A. R. Bachman, Land Utilization Assistant
James A. Brown, Wildlife Protection Assistant
R. W. Trexler, Conservation Education Assistant
Head Stenographer Clerk, Mrs. Catherine B. Hughes
Senior Stenographer Clerk, Mrs. Florence McDonough

JUST YOU AND THE RATTLESNAKES—from Page 15

"Thank God he wasn't in a quick mood today," I said, seriously. Nine snakes were in the bag, and we'd had enough. It was one-thirty. A half-hour of good hunting remained. But the air was sticky and a long walk faced us. Frank Smith suggested we hit for Easton Anglers and Charley LaBar struck out toward Mosier's Rock, we following.

At the edge of a narrow swamp an ugly black pile of rattlesnake glumly awaited us. He was a big fellow and studied us from savage motionless eyes. I got a close picture of him. He never made a move until Charley pinned him. When it was too late he thrashed about, buzzing and angry.

"They sure are leaving the dens," Charley pointed out. "Some summers I don't think they spread far. But if it's awful dry, no telling how far they'll range. Rattlers got to have water."

It was our last snake. We filed past Mosier's Rock, a mass of stone twenty feet high, towering slab upon slab over the forest. We cut to Bushkill Creek and followed its chuckling course down to the car. The hunt was ended. Inside me was a strange mixed feeling: relief almost, satisfaction, and a deep hunger to return there in the Pocono wilds.

At Mosier's Rock in late Spring and early Fall it's just you . . . you and the rattlesnakes.

NOW IS THE TIME—from Page 26

are going to set it away for some time. In that case give it a coat of heavy gun grease. This is all the gun needs to keep it in good shape if you use non-corrosive primers.

However, if you use the old potassium chlorate primer which is still used in Government service cartridges as well as in ammo made prior to 1930, a different method must be used. Reason? The residue of these primers is a salt similar in action to table salt. It absorbs moisture and it eventually will cause rust. As this salt will not dissolve in oil, you must use water. The best method is to run a dry wire brush through the bore to loosen the powder fouling. Then pour some boiling hot water in a pan. If your gun is a bolt action type, remove the bolt and place the muzzle in the water. Pump the water through the barrel thoroughly. The patch on the cleaning rod acts as a plunger. The heat of the water will help dry the bore. Run clean patches through until dry. When cool, oil or grease the bore and it will not rust.

Metal fouling was a serious problem in the days of cupro-nickel jackets. Now gilding metal jackets are universally used by all companies. This cuts fouling considerably but not entirely, especially with a barrel that is worn or pitted with rust spots. Hold the barrel of your rifle toward the light. If metal fouling is beginning to form, you will notice that the lands of the rifling are beginning to darken. This is the first sign. It will grow progressively worse until you notice it as small lumps on the lands of the rifling. The abrupt falling off in accuracy will warn you of this deterioration even if you don't inspect the bore. Rust has a tendency to form under these lumps and it will soon pit the bore, permanently impairing the accuracy of the rifle if it is not promptly removed. When metal fouling gets serious in a worn barrel, an ammonia solution is called for. Winchester crystal cleaner is a prepared ready-to-use ammonia solution that I have used for many years with complete satisfaction. It will save you the bother of making your own solution.

The best way to head metal fouling off before it begins to is use one of the graphite preparations on the market. These preparations tend to build up in the pores of the steel. Use a little on the final cleaning patch before you set the rifle away.

Do not confuse the darkening of the lands directly ahead of the chamber with metal fouling. This will occur from erosion of powder gases and means the barrel is nearing the end of its life accuracy. For example, the 220 swift will show this darkening at about 1200 rounds with still no trouble from metal fouling. Barrel roughness and corrosion are the sole causes of metal fouling and will be most noticeable toward the muzzle of the rifle.

Shotguns are far easier to clean than rifles and, even in the old days of chlorate primers took some neglect without rusting. To clean a shotgun, simply saturate a patch in nitro solvent and run it through the bore three or four times to loosen the powder residue. Then run a brass brush through to remove any leading that may

remain. If you have a bad case of leading due to roughness or neglect, go to the drug store and purchase some blue ointment. Swab the bore using a liberal amount of this ointment on the patch. The mercury in the ointment will amalgamate with the lead and leave the bore bright and clean. In very stubborn cases of leading in shotguns and rifles used with lead bullets, metallic mercury is a last resort. You plug one end of the barrel and, holding your finger over the other, allow the mercury to run back and forth until it collects all the lead. When barrels get this bad, however, I personally discard them. The one exception is when you reload lead bullets and try to drive them at too high a velocity. They will then jump the rifling and leave a heavy deposit of lead even in a perfect barrel.

If you have a bolt action, it is well now and then to take the bolt apart and clean it in gasoline. Then, just a drop of oil on the spring is all that is needed. Never put grease on the interior of the bolt. I know of two people who learned this the hard way last fall one cold morning. A nice buck came along and their rifles refused to fire through a nice cushion of grease.

Wipe out the magazine and magazine well, since dirt and grit will collect in them from use. Then oil or grease the bore and all metal parts depending on the length of time you will have the gun out of service. Never neglect your firearms as they cost real money today. The success of a long hard and expensive hunting trip depends on the smooth working and accurate shooting of your gun.

There is a point to remember before you start hunting or shooting your gun. Wipe the bore clean and dry. An oily bore will cause the first shot to go high. Sometimes it will be high enough to miss the mark entirely. Grease should NEVER remain in the bore when you are ready to shoot. It causes pressures to build up and, depending on the quantity, may wreck the gun and injure the shooter. In below freezing weather, you can get along without cleaning the gun at all, providing it is left out in the cold. So, if you are very tired at the end of the day's hunt and don't want to bother cleaning the gun, leave it outside.

Now for some news from the gun marts. Winchester is ceasing to chamber the 7 mm and the 250 Savage in their Model 70 bolt action. Reloaders and varment shooters will be sorry to hear this. These are two cartridges that would shoot most anything you shoved in them and shoot it well. As I get it, the 7 mm fell victim to the 270 and the 250 was crowded to the ropes by the 257. Some stiff arguments could be advanced in favor of these two great calibers but sales are what keeps the factory running.

From up Ithaca way they are scheduling no doubles this year. A few single barrel trap guns will come through. This move was made in order to concentrate on the repeating shotguns which are coming through at the rate of 1200 a week. That's a lot of guns! The Western long range double and the Lefever single have been permanently discontinued. No Lefever doubles will appear during the balance of the year.

OUTDOOR KIDS—from Page 18

garbage can. Then they tied a strong string to the shutter and they ran the string down to a stick which they had pounded into the ground and which had a screw-eye in the top.

Through this screw-eye they ran the string and from there the string went all the way over to the cabin and inside the doorway. By pulling on the string in the house, the children were able to release the shutter on the side of the camera. The flash equipment was built into the camera, so when the shutter clicked, the flash went off at the same time.

The youngsters checked this several times, and even Pal came along to smell all the things that had been set in place. By dusk, all was ready and the children were excited.

The wait inside the cabin was not easy. Time dragged and it was after 9 o'clock that evening before they heard something outside. They had been quiet all along, but

now they hardly dared move.

"Shhhhhhhh," warned Billy as Jane began to giggle.

A few seconds later, the garbage can lid hit the ground with a clatter. It rolled to a stop.

Inside the cabin, Billy began to pull the string. His arm moved back as the string began to tighten. Suddenly, everything outside was lighted with a terrific flash, made all the more brilliant by the total darkness.

Grabbing up their flashlights, the children ran outside. The thing was gone. But the picture was taken.

Jane and Billy persuaded their father to develop the roll of film right away. A half-hour later it was out of the tank and up to the light.

"A bear!" cried Jane.

"A raccoon," yelled Billy.

And Billy was right. A raccoon was raiding their garbage can and the children had caught him in the act.

GUN DOGS IN THE CITY—from Page 26

At a large kennel in Michigan an excellent dog trainer has solved the noisy problem in a unique manner. In the midst of the houses of near a hundred dogs he has installed a large amplifier, from which an electric cord extends up to his home and is attached to a small microphone which rests on his night table. If the dogs are barking he turns on the switch of this electric apparatus, turns up the volume, and commands "Hush!" The master's voice is highly amplified and is transmitted to the midst of the dogs and they dash madly into their respective houses, completely baffled by the stern command plus the absence of the natural identifying smell of their keeper. This mystery, plus earlier training seems to do the trick. The loudspeaker is also used for convenient communication between persons at the house and those at the kennels.

A dash of cold water on the dog when he barks will greatly discourage him; however the newspaper gag is better.

A grouse dog trainer up state uses an air rifle and shoots from his bedroom window to the slab fence of the runway. The noise of the shot seems to frighten them into quietness. This is a risky method which I would not recommend for fear a dog may be hit in a bad spot and receive injury. I do not believe in any form of brutality in handling dogs.

Keep your dog at home, adapt his range and housing to your lot, spend enough time with him to teach him obedience, keep him healthy, give him sufficient exercise, and he will be a pleasure to you, himself, and your neighbors.

Do not be too hard on him, let him bark once in awhile when he's having fun, but never allow him to put anything over on you.

Keeping your gun dog with you in the city can be real fun, and when the gunning season opens you will be amazed at the greater ease of handling resulting from your year 'round association with him.

HIGHER EDUCATION— from Page 27

keep him from doubling up and bringing his teeth into play. The dogs leaped wildly and in so doing jarred my knapsack to the ground where they shook it vigorously. Glancing down as I slid toward the ground, I allowed my attention to be diverted long enough for the coon to grip my knee with his sharp claws. We fell the remaining six feet, my lamp went out and disappeared. There was a confusion of surging bodies, sharp teeth and various sounds. Not wanting the coon killed I grasped at the dogs' collars until Old Smarty could clear himself and shuffle away. He did not go far. This time he "treed" on a small oak but he might have been three counties away because all the equipment for his capture was lost somewhere in that velvety blackness.

Leaving the dogs at the tree I fumbled my way out to the nearest trail. An hour later I was at home.

Detailed inventory showed a number of scratches and bites that time would heal; a pair of britches that were a total loss; and one stag shirt sadly in need of patches.

Father returned with me to the tree where the dogs were keeping their vigil. The capture was made by pushing the coon out and setting an empty orange crate over him before he could run. An empty sack placed over the end of the crate then the end was crashed in with a well placed kick. Old Smarty was driven into the bag.

A short search of the first tree with the help of Pepper located the missing gear.

The evening still pleases me with its spicy vigorousness, as I turn in the walk to the house. "The boy in the Red Sweater" opens the door. The light turns his sandy hair to burnished copper. In another year he will be ready for school in the city. Vaguely I wondered where I can find another Old Joe. The boy is nearly ready for his Higher Education.



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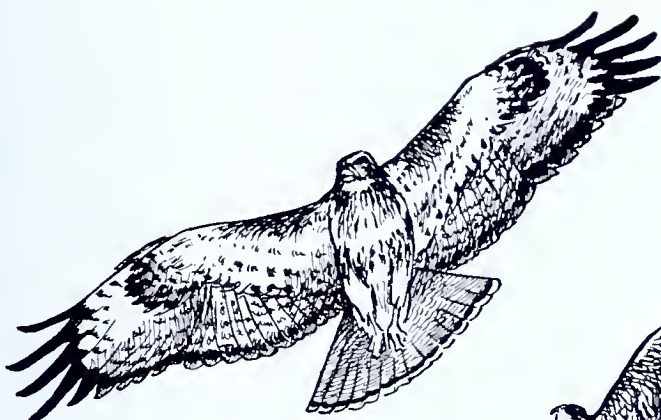
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• BALD EAGLE •
• PROTECTED •



RED-TAILED
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A RED TAIL •
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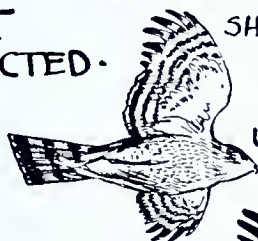


• OSPREY •
OUR LARGEST
HAWK • •
• PROTECTED •



BROAD-WINGED
HAWK •
• PROTECTED •

NOT
PROTECTED •



SHARP-SHINNED
HAWK

USUALLY SEEN
FLAPPING,
NOT
SOARING •

• COOPER'S HAWK •



• GOSHAWK •



• MARSH HAWK •
IMMATURE

WHITE HALF MOON ON
THE RUMP IDENTIFIES
THIS HAWK •

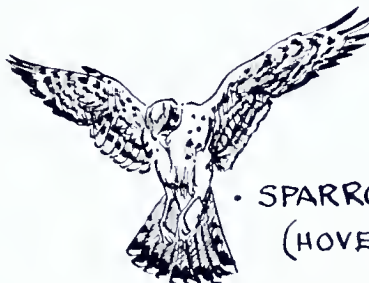
• PROTECTED •



DUCK
HAWK • •

LOOKS VERY
DARK •

• PROTECTED •



• SPARROWHAWK •
(HOVERING)

• PROTECTED •



THE STORY BEHIND THE COVER



Scattered throughout Pennsylvania today are 181 areas where men "who love the chase more than the kill" or thrill to the stirring work of a hunting dog can train and exercise their canine companions at any time during the entire year. With full realization that good hunting dogs are great conservation assets, the Game Commission for many years has authorized establishment of and supervised these Special Dog Training Areas.

Contrary to popular belief, however, these Areas are not open to hunting or trapping nor are they generally open for dog training by the general public. Under the Game Law the Commission is authorized to issue Dog Training Area permits upon request and payment of a ten dollar registration fee to any club or organization having 20 or more members who are citizens of the Commonwealth or to any group of 20 or more citizens of the Commonwealth. Such a club, organization or group is required to stock the land each year at their own expense with at least 25 pieces of game per one hundred acres unless the Commission considers the area adequately stocked. It must also post the Area with special signs prior to October each year. None of the permittees is allowed to hunt or trap on this land with the exception

that they may be allowed to shoot predators on the area.

Special Dog Training Areas, which are privately owned and operated, should not be confused with the Commission's Dog Training Preserves. Pennsylvania currently has 9 of these Preserves, ranging in size from about a hundred to a thousand acres, located in Clarion, Erie, Forest, Lycoming, Montgomery, Washington and York Counties. Here hunting dogs can be trained and field trials conducted. All Dog Training Preserves are open to the public, although hunting on all of them is either prohibited or restricted to certain species, usually deer and bear.

For men like District Game Protector Charles Shannon, Mt. Gretna, shown on this month's cover at the gate to the Mt. Gretna Beagle Club Training Area in Lebanon County, these Special Dog Training Areas mean additional duties but a chance to improve the sport by encouraging the development of good hunting dogs.

For men like Dr. A. H. Heisey, Quentin, shown with Game Protector Shannon, such Areas are the training grounds for some of the greatest thrills in the outdoors—the spirited chase of a cottontail by a beagle and the help of a faithful hunting companion in seeking game.

A GOOD HUNTING DOG IS A REAL PAL AND A GREAT CONSERVATION ASSET!

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